

CATALOG

2019-2020



El Camino College
Where you belong. Where you succeed.

2019 – 2020 Catalog



El Camino Community College District A Public Community College

Serving: El Segundo, Hawthorne, Hermosa Beach, Inglewood, Lawndale, Lennox, Manhattan Beach, Redondo Beach, and Torrance

Address

El Camino College • 16007 Crenshaw Boulevard, Torrance, CA 90506-0001

Telephone Numbers

1-866-ELCAMINO or 310-532-3670
Admissions: 310-538-5700
Telecommunications for the Deaf: (TDD) 310-660-3445

Website

www.elcamino.edu

Academic Calendar

Fall Semester - 2019

Faculty & Staff Development Flex Days	Thurs.-Fri	August 22-23, 2019
Fall Semester Classes Begin	Saturday	August 24, 2019
Weekday Classes Begin	Monday	August 26, 2019
Last Day to Drop and be Eligible for a Refund (1st 8-Week Session)	Friday	August 30, 2019
Labor Day Holiday (Campus Closed)	Monday	September 2, 2019
First Day to Apply for Graduation and Certificates (Fall)	Tuesday	September 3, 2019
Last Day to Add (Full Semester Courses)	Friday	September 6, 2019
Last Day to Drop and be Eligible for a Refund (Full Semester)	Friday	September 6, 2019
Last Day to Challenge Residency Status for Current Semester	Friday	September 6, 2019
Last Day to Drop without Notation on Permanent Record	Friday	September 6, 2019
Last Day to Apply for Degrees and Certificates (Fall)	Thursday	October 17, 2019
Midterm Classes Begin	Saturday	October 19, 2019
Veterans Day Holiday (Campus Closed)	Monday	November 11, 2019
Last Day to Drop with a "W"	Friday	November 15, 2019
Thanksgiving Day Holiday/Weekend (Campus Closed)	Thurs.-Fri	November 28-29, 2019
Fall Semester Ends	Friday	December 13, 2019
Winter Recess (Campus Closed)	Mon.-Tues	Dec. 24, 2019-Jan. 1, 2020

Winter Session - 2020

First Day to Apply for Degrees and Certificates (Spring)	Thursday	January 2, 2020
Winter Session Classes Begin	Monday	January 6, 2020
Last Day to Add	Thursday	January 9, 2020
Last Day to Drop without Notation on Permanent Record	Thursday	January 9, 2020
Last Day to Drop and be Eligible for a Refund	Thursday	January 9, 2020
Martin Luther King Holiday (Campus Closed)	Monday	January 20, 2020
Last Day to Drop with a "W"	Wednesday	January 29, 2020
Winter Session Ends	Thursday	February 6, 2020

Spring Semester - 2020

Faculty & Staff Development Flex Days	Wed.-Thurs	February 13-14, 2020
Lincoln's Day Holiday (Campus Closed)	Friday	February 7, 2020
Spring Semester Classes Begin	Saturday	February 15, 2020
Washington's Day Holiday (Campus Closed)	Monday	February 17, 2020
Weekday Classes Begin	Monday	February 18, 2020
Last Day to Drop and be Eligible for a Refund (1st 8-Week Session)	Friday	February 21, 2020
Last Day to Add (Full Semester Courses)	Friday	February 28, 2020
Last Day to Drop and be Eligible for a Refund (Full Semester)	Friday	February 28, 2020
Last Day to Challenge Residency Status for Current Semester	Friday	February 28, 2020
Last Day to Drop without Notation on Permanent Record	Friday	February 28, 2020
Last Day to Apply for Degrees and Certificates (Spring)	Friday	February 28, 2020
Spring Recess (Faculty & Students)	Sat.-Fri	April 11-17, 2020
Midterm Classes Begin	Saturday	April 18, 2020
Last Day to Drop with a "W"	Friday	May 15, 2020
Memorial Day Holiday (Campus Closed)	Monday	May 25, 2020
El Camino College Commencement	Friday	June 12, 2020
Spring Semester Ends	Friday	June 12, 2020

Summer Sessions - 2020

Six-Week Session Begins	Monday	June 22, 2020
Last Day to Drop and be Eligible for a Refund	Thursday	June 25, 2020
Last Day to Add	Thursday	June 25, 2020
Last Day to Drop without Notation on Permanent Record	Thursday	June 25, 2020
Independence Day Holiday (Campus Closed)	Thursday	July 2, 2020
Last Day to Drop with a "W"	Tuesday	July 21, 2020
Six-Week Session Ends	Thursday	July 30, 2020
Eight-Week Session Begins	Monday	June 22, 2020
Last Day to Drop and be Eligible for a Refund	Monday	June 29, 2020
Last Day to Add	Monday	June 29, 2020
Last Day to Drop without Notation on Permanent Record	Monday	June 29, 2020
Independence Day Holiday (Campus Closed)	Thursday	July 2, 2020
Last Day to Drop with a "W"	Thursday	July 30, 2020
Eight-Week Session Ends	Thursday	August 13, 2020
Second Six-Week Session Begins	Monday	July 6, 2020
Last Day to Drop and be Eligible for a Refund	Thursday	July 9, 2020
Last Day to Add	Thursday	July 9, 2020
Last Day to Drop without Notation on Permanent Record	Thursday	July 9, 2020
Last Day to Drop with a "W"	Tuesday	August 4, 2020
Six-Week Session Ends	Thursday	August 13, 2020

Dates subject to change.

Please check online for the most up-to-date calendar: www.elcamino.edu/academics/calendar.asp

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About Us

Board of Trustees

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President

William Beverly

Vice President

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Member

Nilo Michelin

Member

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Accreditation

El Camino College is accredited by the Accrediting Commission for Community and Junior Colleges of the Western Association of Schools and Colleges, 10 Commercial Boulevard, Suite 204, Novato, CA 94949-6175, telephone 415-506-0234, www.accjc.org, an institutional accrediting body recognized by the Commission on Recognition of Postsecondary Accreditation and the U.S.

Department of Education. The University of California, the California State University and other colleges and universities give full credit for appropriate courses completed at El Camino College. El Camino College is approved for veterans by the Office of Postsecondary Education, California State Department of Education.

Membership

El Camino College is a member of the Community College League of California.

Certification

The El Camino Community College District hereby certifies that this Catalog is true and correct in content as required by DVB Circular 20-76- 84, Appendix P, Paragraph 6(a), Department of Education, State of California.

ECC Police Department

The El Camino College Police Department is in charge of the personal safety and security for all who attend classes, as well as all who are employed by El Camino College. Open at all times, the department is located on the corner of Crenshaw and Redondo Beach boulevards in Parking Lot K. ECC Police offers lost and found services, as well as courtesy shuttle service between parking lots and classes. Also available is first aid, and help in all emergency situations. The department may be telephoned directly at 310-660-3100. Traffic and parking regulations are posted throughout campus. ECC Police will issue citations to violators of these regulations. All such fines are payable to the Campus Police Department.

Marketing & Communications

The El Camino College Catalog is published annually through the Marketing & Communications Department, El Camino Community College District, 16007 Crenshaw Boulevard, Torrance, CA 90506.

El Camino College has made every reasonable effort to determine that this Catalog is accurate. Courses and programs offered, together with other matters contained herein, are subject to change without notice by the administration for reasons related to student enrollment and level of financial support, or at the discretion of the district and the college. The district and the college further reserve the right to add, amend or repeal any rules, regulations, policies and procedures.

History

In 1946, after strong recommendations by a consulting team to establish a two-year college in the Inglewood-South Bay area, the governing boards of the Centinela Valley, Redondo, Inglewood and El Segundo school districts won 10-1 voter approval for the creation of a junior college.

Torrance soon joined the newly chartered group, and the El Camino Community College District was officially established on July 1, 1947.

Located centrally in the South Bay, the El Camino Community College District encompasses seven unified and high school districts, and nine cities - a population of nearly 533,000 residents.

Early classrooms were surplus World War II barracks which were trucked north from the old Santa Ana Army Air Base in Orange County.

The first permanent building for classroom instruction was the shop building, which opened in 1949. The women's gym, field house, another shop building and the Social Science Building followed. Major construction was the order of business nearly every year during the growth years of the college.

El Camino College's buildings cover 1,129,112 square feet and were built at a cost of \$28 million. That means 27 structures were completed without any bonded indebtedness to the district.

In November 2002, voters of the El Camino Community College District approved a \$394 million facilities bond measure. The successful passage of this first-ever bond measure allowed the district to build several new buildings, engage in major remodeling and reconstruction of others, and take steps to improve the health and safety of students and employees.

History was made again in November 2012 when district voters approved Measure E, a \$350 million facilities bond measure. Measure E will provide funds for safety, technology, and energy-saving improvements to classrooms, labs and other instructional facilities.

Bond money can be used only on facilities and equipment. None of it can be used for salaries or programs. A Citizens' Bond Oversight Committee provides an annual report to the public regarding the use of the funds.

El Camino College Administration, Faculty and Trustees

The faculty has grown since the first 30 members, to about 900 full-time and part-time instructors today. Nearly 25 percent of the full-time faculty have earned doctoral degrees while more than 90 percent have master's degrees. The remainder have excellent credentials for their areas of expertise.

The college is governed by the five members of the El Camino Community College District Board of Trustees. Each is elected for a four-year term. Board meetings are held monthly and are open to the public.

Leading the administration is the college's president, who also serves as superintendent of the El Camino Community College District. The president is assisted directly by five vice presidents. Their areas of responsibility are academic affairs, administrative services, student services, human resources, and Compton College.

As the college grew from an enrollment of fewer than 500 in 1946 to 33,000 students today, the curriculum expanded to include not only lower-division courses but an honors program and numerous vocational programs. Today, El Camino College students enjoy a broad curriculum featuring 99 degree programs and 83 certificate programs.

The college confers the associate degree each academic year on nearly 2,000 students who have completed 60 semester units and have satisfied their major field of study obligations. Many students each year also qualify for certificates of completion, signifying course requirements have been met in major skill areas.

The college is a reflection of its six presidents. Founding president Forrest G. Murdock served until his retirement in 1958. He was succeeded by Stuart E. Marsee whose tenure saw 24 years of financial stability, building and growth. Retiring in 1982, he turned the campus over to Rafael Cortada. Cortada's legacy to the college was the establishment of the Honors Transfer Program and development of the El Camino College Foundation, which raises funds for programs not supported through the general budget. Sam Schauerman, who had served the college first as a dean of instruction, then as vice president of instruction, became El Camino College's fourth president from 1987 to 1995. Thomas M. Fallo became the fifth president in 1995 and served until his retirement in 2016. An alumnus of El Camino College, Fallo supported student success through a million-dollar scholarship program, and by leading the district as it sought and obtained voter approval for two facility bond measures totaling \$744 million for safety and technology upgrades. El Camino College today is under the leadership of Dr. Dena P. Maloney, who is guiding the college through the 21st century.

El Camino College Foundation

The El Camino College Foundation is an independent 501(c)(3) organization whose mission is "to develop community relationships and raise funds to support students' success in education and life." The El Camino College Foundation was established in 1983 upon the recommendation of El Camino College President Rafael Cortada. The Foundation supports students by providing financial resources through scholarships and emergency textbook funds. Additionally, the Foundation establishes relationships with key stakeholders, both individuals and corporations, in the community to develop collaboration, engagement and financial resources for El Camino College. Additional support comes through Foundation funding of programs and student services such as mentoring, supplemental instruction and tutoring, as well as support for faculty through innovative, educational tools that enhance the learning environment.

Through the generous support of individuals, businesses, and local corporations, the El Camino College Foundation is able to respond to the highest priority needs of our students and the college. These resources help sustain and grow important programs and services for students, enabling them to reach their educational goals.

For more information about how to support El Camino College, please visit the El Camino College Foundation website at www.elcaminocollegefoundation.org, call 310-660-6040 or send an email to asala@elcamino.edu. The Foundation is a 501(c)(3) charitable organization. All donations are tax deductible.

Administration

SUPERINTENDENT/PRESIDENT

Dena P. Maloney, Ed.D.

310-660-3593, ext. 3111

VICE PRESIDENT, ADMINISTRATIVE SERVICES

James Buysse, M.S. (Interim)

310-660-3593, ext. 3107

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310-660-3593, ext. 3807

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VICE PRESIDENT, COMPTON COLLEGE

Barbara Perez, M.S.

310-900-1600, ext. 2130

VICE PRESIDENT, ACADEMIC AFFAIRS

Jean Shankweiler, Ph.D.

310-660-3593, ext. 3119

PRESIDENT/CEO, COMPTON COLLEGE

Keith Curry, Ed.D.

310-900-1600, ext. 2023

Mission and Vision

Mission Statement

El Camino College makes a positive difference in people's lives. We provide excellent comprehensive educational programs and services that promote student learning and success in collaboration with our diverse communities.

Vision Statement

El Camino College will be the college of choice for successful student learning that transforms lives, strengthens community, and inspires individuals to excel.

Statement of Values

Our highest value is placed on our students and their educational goals; interwoven in that value is our recognition that the faculty and staff of El Camino College are the College's stability, its source of strength and its driving force. With this in mind, our five core values are:

People

We strive to balance the needs of our students, employees and community.

Respect

We work in a spirit of cooperation and collaboration.

Integrity

We act ethically and honestly toward our students, colleagues and community.

Diversity

We recognize and appreciate our similarities and differences.

Excellence

We aspire to deliver quality and excellence in all we do.

Institutional Effectiveness Outcomes

Institutional effectiveness involves College efforts toward continuous improvement in institutional quality, student success, and fulfillment of the Mission. The College's integrated assessment, evaluation, and planning processes are put into practice with the ultimate outcome of greater institutional effectiveness - more students from our diverse communities will attain educational success and achieve their academic goals.

The following outcomes will be used to measure progress on student achievement and improvements in institutional effectiveness at El Camino College.

1. Student Readiness Rate
2. Successful Course Completion Rate
3. Remedial English Completion Rate
4. Remedial Math Completion Rate
5. Three-Term Persistence Rate
6. Achievement Rate
7. Completion Rate
8. Transfer Rate
9. Degrees and Certificates awarded
10. Number of Transfers

Improvement goals to be achieved by the end of the Strategic Plan (Academic Year 2019-2020) are developed through College wide consultation, with annual progress compared with a baseline year. Institutional effectiveness outcomes will be monitored annually for progress on each goal. In addition, an overriding priority is to reduce existing differences in achievement by demographic characteristics across all measures.

Strategic Initiatives

In order to fulfill the mission and make progress toward the vision, El Camino College will focus on the following strategic initiatives. Strategic Initiatives represent the areas of focused improvement. Objectives are College wide plans to make progress on each initiative. Measures assess that progress during the period of the Strategic Plan (2015-16 to 2019-2020).

1. Student Learning

Support student learning using a variety of effective instructional methods, educational technologies, and college resources.

Objectives:

1. Develop a comprehensive professional development plan that ties in with campus plans and initiatives to promote student success.
2. Incorporate instructional approaches that are positively associated with student success and persistence.
3. Provide specific and relevant technology training to support integration of technology with instruction.
4. Provide equipment needed to support faculty use of technology.
5. Institute outcomes-based conference attendance with a required sharing component for broader College benefit, where applicable.

2. Student Success and Support

Strengthen quality educational and support services to promote and empower student learning, success, and self-advocacy.

Objectives:

1. Implement programs and services as detailed in the Student Success and Support Program Plan focused on pre-enrollment (access in), post-enrollment (access through), and graduation or transfer (access out).
2. Implement the plans indicated by the Student Equity Plan (SEP), focused on improving successful outcomes for all students.
3. Implement the College Master Plan, focused on carrying out the Strategic Plan through educational and resource planning.

3. Collaboration

Advance an effective process of collaboration and collegial consultation conducted with integrity and respect to inform and strengthen decision-making.

Objectives:

1. Develop, promote, and implement an employee recognition plan.
2. Conduct annual review of the Making Decisions at El Camino College document which includes member orientation, purpose review, planning, goal-setting, and self-evaluation for all consultation committees.
3. Strengthen collaboration among programs, across disciplines and college areas.
4. Improve publication of the broad input on college processes.
5. Add this initiative to the purpose statement of each collegial consultation committee.

4. Community Responsiveness

Develop and enhance partnerships with schools, colleges, universities, businesses, and community-based organizations to respond to the educational, workforce training, and economic development needs of the community.

Objectives:

1. Develop strategic partnerships that include program advisory committees that address the current and future workforce development needs of the local communities and the region.
2. Develop corporate partnerships that enhance STEM training to prepare our students for STEM programs and careers.
3. Develop inter-segmental programs linking feeder high school districts with El Camino College and regional universities to create strong and clear pathways for students.

5. Institutional Effectiveness
Strengthen processes, programs, and services through the effective and efficient use of assessment, program review, planning, and resource allocation.

Objectives:
 1. Develop an integrated program review and planning tool.
 2. Establish benchmarks and aspirational goals for student achievement.
 3. On a regular basis, gather current information on our community to ensure that we are responsive to community needs.
 4. Strengthen collaboration between programs serving students.
 5. Facilitate a strong fiscal position to allow reasoned responses to fiscal threats.
 6. Add this initiative to the purpose statement of each committee involved with institutional effectiveness processes.
6. Modernization
Modernize infrastructure and technological resources to facilitate a positive learning and working environment.

Objectives:
 1. Implement the Technology Plan to meet the developing information technology needs of the campus.
 2. Continue implementation of the Facilities Master Plan to modernize campus facilities and infrastructure, revising as needed.
 3. Implement safety cameras and other technological aspects of campus safety plan.

Student Learning Outcomes

Institutional Learning Outcomes

Institutional Learning Outcomes (ILOs) define the skills and knowledge a student should possess upon completion of a course of study at El Camino College.

El Camino College Institutional Learning Outcomes (ILO):

Students completing a course of study at El Camino College will achieve the following learning outcomes:

ILO 1 - Critical Thinking

Students apply critical, creative and analytical skills to identify and solve problems, analyze information, synthesize and evaluate ideas, and transform existing ideas into new forms.

ILO 2 - Communication

Students effectively communicate with and respond to varied audiences in written, spoken or signed, and artistic forms.

ILO 3 - Community and Personal Development

Students are productive and engaged members of society, demonstrating personal responsibility, and community and social awareness through their engagement in campus programs and services.

ILO 4 - Information Literacy

Students determine an information need and use various media and formats to develop a research strategy and locate, evaluate, document, and use information to accomplish a specific purpose. Students demonstrate an understanding of the legal, social, and ethical aspects related to information use.

Student Learning Outcomes and Service Area Outcomes

Student Learning Outcomes (SLOs) define the skills and knowledge a student should possess upon completion of a particular course.

Program Learning Outcomes (PLOs) define the skills and knowledge a student should possess upon completion of a particular program.

Service Area Outcomes (SAOs) measure the level of understanding, skills, and/or knowledge a student will possess upon interaction with a student support service or administrative service.

SAO, SLO, PLO, and ILO information may be found on the SLO webpage:

www.elcamino.edu/academics/slo/

The standards for accreditation require colleges to assess student learning on a regular and continuous basis to ensure that students are learning the course and program objectives and content as well as acquiring the understanding, skills, and/or knowledge desired by student support services and administrative services. Through an effective student learning outcomes assessment process, faculty members are able to review their courses and make adjustments to improve student achievement while student support services and administrative services staff are able to review the effectiveness of the services provided. The college is required by the Accrediting Commission for Community and Junior Colleges (ACCJC) Standards for Accreditation to provide the accrediting commission and students with evidence that an ongoing and rigorous program for assessment of student learning outcomes is in place. The college evaluates the instructional and support services programs on a regular schedule to improve student learning through scheduled program review, assessment of SLOs, PLOs, ILOs, and SAOs, as well as program planning and evaluation.

Admission Requirements

Admission

Any person over the age of 18 or possessing a high school diploma or its equivalent from the USA or other nation shall be admitted unless prohibited by law. If under the age of 18, students qualify if they have 1) graduated from high school or 2) passed the California High School Proficiency Examination.

Special Part-Time or Full-Time Students

El Camino College may admit as a special parttime student anyone in grades 11 or 12 who, in the opinion of the college president, may benefit from instruction. These students will be subject to any change in regulations for concurrently enrolled students and all subsequent policies and procedures as adopted by El Camino College. Admission as a special part-time student for anyone in grades 11 or 12 are subject to the requirements and limitations of El Camino College Board Policy 5060 and Administrative Procedure 5011.

Students who attend private and parochial schools follow the same residence requirement. Concurrently enrolled students shall receive credit for community college courses which they complete. Credit may be used for high school graduation, according to Section 1630, Title 5, California Administrative Code.

Concurrent Enrollment Application forms, which are available in the Admissions Office, must be presented when the student files an application for admission to the college. A separate approval must be provided for each semester or summer session in which the student is enrolled. Concurrently enrolled students must comply with all state and college policies, and all procedures, and must meet all requirements by the published deadlines for each semester and/or session.

Residents of other states and international students must pay out-of-state tuition. AB 540 allows legally qualified students who meet specific criteria to pay in-state tuition at California public colleges and universities. AB 540 does not provide access to federal financial aid. For more information, please contact the Admissions Office.

California Residency Definition

A California resident for tuition purposes is defined as a citizen of the United States or a person who holds a status which allows him/her to establish residency in the United States, and can provide evidence of physical presence in the state of California for at least one year prior to the residency determination date, and evidence of intention to make California his/her permanent home. Documented evidence must correspond to dates of physical presence in California. A non-resident is a person who does not meet the residency requirements of the state of California for tuition purposes or who is a citizen of a foreign country and holds only temporary status in the United States.

California Residence Waiver

AB 540 allows qualified students who meet specific criteria to pay in-state tuition at California public colleges and universities.

Residence Requirements

A student 19 years or older who resides in California is classified as a district resident as defined by the California Education Code and may enroll in any courses for which he/she is qualified. Residence is determined based on two factors: continued physical presence in California and intent to maintain California as the legal state of residence. The student cannot have engaged in any activity that contradicts California residency law and the student may not be in a classification that by law prohibits the establishment of residence. The residence of the student under age 19 is determined by the legal residence of the student's parents or legal guardian as defined by law.

Exceptions to Residence Determination

A list of exceptions to residence determination will be issued by the Admissions Office to each student who is classified as a "non-resident."

Consideration will be given to appropriate evidence submitted by the student who has or is currently serving in the United States military service or who is a dependent of a member of the United States military service. The student should contact the Admissions Office for possible classification as a resident.

A student who is classified a non-resident may petition for residence in accordance with the laws and regulations of California and the policies and procedures of El Camino College. The burden of proof is on the student. The petition for residence reclassification must be filed by the published deadline.

Appeal Procedure

Any student, after a decision on residence classification is rendered, may make written appeal as provided in Title 5, California Administrative Code, within 30 calendar days of notification.

Concurrent Enrollment of K-12 Students

Board Policy 5010 and Administrative Procedure 5011

It is the policy of the El Camino Community College District, subject to the relevant provisions of the California Education Code and the fulfillment of all El Camino College policies and procedures, to admit as concurrently enrolled students qualified high school students who have successfully completed the 10th grade and are currently enrolled in the 11th or 12th grade.

The Superintendent/President or designee has developed procedures for the consideration of highly gifted K-10th grade students.

All high school students concurrently enrolled shall be exempted from the enrollment fee, Health Center Fee, and Representation Fee.

High school students would be required to pay all other required fees as adopted by the District.

Accompanying procedures are available in the Admissions Office.

F-1 Visa Procedure

International Students

El Camino College is approved by U.S. Citizenship and Immigration Services as an institution of higher learning for non immigrant F-1 and M-1 visa students. Prospective students may apply for admission from their homeland by requesting an application packet from the International Student Program (ISP) office. Students attending another school in the United States on an F-1 visa may request a transfer to El Camino College by contacting the International Student Program office. International Students are encouraged to visit the International Student Program webpage at www.elcamino.edu/academics/is to download the application.

It is also possible for individuals whose B-type visas are stamped, "Prospective Student" (and certain other non-immigrant visas), to file papers through the International Student Program Office to attempt to change their status to F-1. The International Student Program office can provide prospective students with information regarding this procedure and the appropriate forms to file.

All international students who are attending El Camino College for the first time must attend an orientation before registering in classes. These orientations are scheduled just before the beginning of the fall and spring semesters. New students should plan to begin their first semester at El Camino College during the fall or spring semester. International students who do not attend the orientation are subject to the loss of privileges.

International Student Application Procedures

Application deadlines are July 1 for the fall semester and December 1 for the spring semester. A packet of information giving timelines and procedures for applying to El Camino College is sent when a prospective student requests application materials. A non-refundable processing fee must be submitted to the college with the application packet.

Prospective students may request an application packet by writing to the International Student Program, El Camino College, 16007 Crenshaw Blvd., Torrance, CA 90506, USA or by visiting the International Student Center. The International Student Center, which houses the International Student Program and the El Camino Language Academy, is located within the Student Services Center. The application packet includes an official application, instructions for completing the application and submitting additional required documents, and other useful information. Visit the webpage www.elcamino.edu/academics/is where it is also possible to obtain the admission application and information regarding the application process.

After all application material is on file, it is reviewed to assure that the applicant qualifies for admission to El Camino College. When accepted, applicants are mailed the Certificate of Eligibility (I-20) along with further information about orientation and priority registration and helpful visa, travel and housing information. Prospective students are required to present the Certificate of Eligibility (I-20), proof of financial support, one photograph, a visa application form, and a receipt for the SEVIS I-901 fee to a U.S. Embassy or Consulate to apply for the F-1 Student Visa.

Note: International students are not guaranteed admission to El Camino College. Once capacity for the program for that term has been reached, no further consideration will be granted. F-1 visa students who miss the published application deadline may be denied admission to El Camino College.

English Proficiency

Classes are conducted in English, so it is necessary for the prospective F-1 visa student to be reasonably proficient in reading, writing and speaking English. New students must demonstrate proficiency before being issued the I-20 by having English Proficiency Test results, or completion of the equivalent level at an accredited language program is required. Prospective students outside the United States whose first language is English, or who can demonstrate English proficiency, may ask to have the TOEFL waived by contacting the El Camino College International Student Program office. Students who have been attending a school in the United States may also be able to provide an alternate proof of English proficiency.

This is handled on a case-by-case basis by the International Student Program coordinator.

All new students will also take the ESL Placement Test (Accuplacer) to determine placement in ESL or English classes. Placement testing is part of the orientation schedule, but students who wish to take the placement tests before orientation may do so by contacting the International Student Program office for testing information. Students who have scored above 600 on the TOEFL, or whose native language is English, will take the regular English Placement Test.

The El Camino College code for mailing English Proficiency Test (TOEFL) results is 4302.

El Camino Language Academy (Intensive English Program)

Students who study intensive English at the El Camino Language Academy (ECLA) have an easy transition to El Camino College, where they can earn an associate degree and transfer to a four-year college or university. The ECLA program includes 14 weeks of study during the fall and spring semesters and eight weeks in the summer.

Students who do not meet the minimum English requirements for El Camino College, or who want to improve their English language skills, can enroll in the El Camino Language Academy. ECLA applications are available at the International Student Program Office or through the El Camino Language Academy directly at www.elcamino.edu/commadv/langacad/. All visa types are accepted.

Transcripts

Students applying for admission from outside the United States should send translated copies of transcripts for all high school and college work they have completed.

Students already attending school in the United States should direct the admissions offices of any high schools, colleges or universities in the United States which they are attending, or have attended, to mail an official transcript directly to the International Student Program at El Camino College. Transcripts translated into English from any high schools, colleges, and technical or vocational schools attended in the student's native country must also be sent to El Camino College.

Housing

Although there are no dormitories available at El Camino College, assistance for F-1, M-1, and J-1 students in locating housing is available through the International Student Program Office. Information regarding housing is included in the information packet sent to students when they are accepted to the college or may be found at www.elcamino.edu/academics/is.

Estimated Expenses

For the 2018-2019 academic year, approximately \$4,525 is required for tuition, fees, and mandatory medical insurance for each 16-week semester or \$9,050 per academic year.

Textbooks and supplies are approximately \$600 for each semester or \$1,200 per year. Room and board expenses vary depending upon the type of housing chosen, but may be estimated for the 10-month academic year at \$10,300.

An estimate of total expenses for the 10-month academic year, including fees, textbooks, supplies, room and board, and insurance is \$20,300. This does not include personal spending money.

Student Success and Support Program

Student Success and Support Program

The Student Success and Support Program offers services that help students attain educational and career goals. The services are designed to match abilities and personal goals with the college's curriculum, programs, and services.

Student Success and Support Program services are intended to help students make informed decisions as they develop an educational plan.

These services support educational development and recognize each student's worth.

Students are expected to participate in a number of steps to be eligible for priority registration.

Steps to Enrollment

Step 1. File a college application and declare one of these goals:

- Associate degree and transfer to a university
- Associate degree in a career technical program
- Associate degree in a general education program
- Certificate in a career technical program
- Transfer to a university without an associate degree

Step 2. Prepare and test

Placement is based on multiple measures, including assessment tests. It is important to prepare for the assessment tests by reviewing material prior to taking the test. Preparation materials are available online at www.elcamino.edu/student-services/assessment-testing. Take appropriate placement tests and consult with an academic counselor. Placement testing is available in the Assessment/ Testing Center, SSVC 217. English or ESL and mathematics assessment should be completed before attempting to register in classes. Please read the "Assessment Procedures" on the following page, for more information about specific placement or specialized tests.

Students must have transcripts or grade slips from all colleges attended before making a counseling appointment. English, mathematics, or other courses completed with a grade of C or better at an accredited college may be used to meet prerequisites or corequisites if the completed courses are equivalent to El Camino College courses. High school transcripts may be used as part of multiple measures. Official transcripts must be mailed from each high school, college, or university to the Records Office.

Step 3: Participate in New Student Orientation

New students must attend a New Student Orientation session or complete the online orientation (<https://ecc-portal.elcamino.edu/>) in order to complete the Student Success Support Program process. The New Student Orientation is intended for students who have not attended college before. The orientation will teach students about educational options and important guidelines for achieving academic goals.

Step 4: Educational planning with a counselor and follow-up

All new students are required to meet with a counselor prior to registration to develop an educational plan. Continuing students should meet with a counselor at least once a year as part of the Student Success Support Program process. During this meeting, students will complete a written educational plan, which is a list of recommended courses for students to take to reach their educational goal. Any concerns regarding the Student Success Support Program process may be addressed with the Dean of Counseling and Student Success. A formal grievance must follow the policy and procedures outlined in this catalog.

For the non-matriculant student:

All services and classes are open to general admission students. If students do not wish to matriculate, they will nonetheless be provided full access to services and classes at El Camino College. General admission students will not be required to complete the Student Success Support Program process.

Orientation

All students are required to participate in orientation to become familiar with the college and its resources. New Student Orientation is offered online (<https://ecc-portal.elcamino.edu/>) and on campus. Special orientation sessions are arranged for high school students through their high schools. Orientations may be arranged for students who participate in support programs, such as Honors Transfer, First Year Experience, EOPS, Financial Aid, students with a disability, athletes, and international students.

Assessment/Testing

Students are highly encouraged to review or prepare before taking placement tests. Students' performance on the placement tests determines the course level in which they will enroll. Information regarding the tests and preparation is available at: www.elcamino.edu/student-services/assessment-testing.

Assessment Procedures

Placement in English, English as a Second Language (ESL), mathematics, and chemistry courses is based upon assessment, which includes placement test scores and other multiple measures such as previous courses completed and grades received in those courses, use of skills at work, and work-related training. Refer to course descriptions in the El Camino College Catalog to find out which placement tests are required or recommended for the courses you wish to take. After you receive your testing results, you should arrange to see a counselor for help in planning your program.

In order to begin this process, you must first apply online and have an El Camino College application on file. Next, complete your placement tests at the Assessment/Testing Center located in Room 217 of the Student Services Center. A photo ID, such as a driver's license, and El Camino College ID number (the number received at the time of application) are required to test or obtain copies of past test results. Most of the placement tests are computerized and must be completed before registering for courses. Re-testing is limited and may not be done after enrollment into any course related to the test.

English Placement Test

The computerized English Placement Test should be completed before registering and may not be repeated once enrolled into both English course sequences at El Camino College. You should complete this test for any course that has an English course as a prerequisite, corequisite, or recommended preparation. If you have satisfactory grades in English courses from an accredited college or university, you should present a grade slip or transcript of those courses to your counselor for placement evaluation. High school courses completed or ACT/SAT verbal scores may NOT take the place of the English Placement Test, but may be used as part of your overall assessment.

In order to begin the testing process, you will first need to file your application online. For testing, you will need a photo ID (such as a driver's license), your El Camino College ID number, and a pen.

After you receive your test results, a further review of your placement recommendation may be requested. Information and appropriate petition forms are available from the Assessment/Testing Center.

English as a Second Language (ESL) Test

A student who has no knowledge of English may participate in the assessment process and may enroll in courses as recommended. However, prospective students should be aware that the lowest level ESL courses at El Camino College do NOT start at the very beginning, and all ESL courses are taught in English.

The ESL Placement Test should be completed before registering. Students must complete this test for any course that has an ESL course as a prerequisite. Because of the variability in curriculum, ESL classes taken at another institution cannot be used alone to determine placement.

In order to begin the testing process, you will first need to file your application online. For testing, you will need a photo ID (such as a driver's license), your El Camino College ID number, and a pen.

The ESL test is in two parts and requires two visits to campus. The first part is on a drop-in basis; the second part is by appointment only. Both parts MUST be completed before registering.

After you receive your test results, a further review of your placement recommendation may be requested. Information and appropriate petition forms are available from the Assessment/Testing Center.

Mathematics Placement Test

The computerized Mathematics Placement Test should be completed before registering in any mathematics course and may not be repeated once enrolled into the mathematics sequence at El Camino College. If you have satisfactory grades in mathematics courses from an accredited college or university, you should present a grade slip or transcript of those courses to your counselor for placement evaluation. High school courses completed or ACT/SAT math scores may NOT take the place of the Mathematics Placement Test, but may be used as part of the overall assessment. Mathematics assessment/placement results are generally valid for two years.

In order to begin the testing process, you will first need to file your application online. For testing, you will need a photo ID (such as a driver's license), your El Camino College ID number, and a pen.

After you receive your test results, a further review of your placement recommendation may be requested. Information and appropriate petition forms are available from the Assessment/Testing Center.

Chemistry Placement Test

The Chemistry Placement Test should be completed before registering and may be taken only once. The test places a student either in Chemistry 1A or Chemistry 4.

Note: The test may not be taken if a student has ever enrolled in Chemistry 4. Previous high school or college chemistry courses do not necessarily qualify a student for Chemistry 1A. Students who have never taken a chemistry course or who want a beginning-level course should not test, but may enroll in Chemistry 4, 20, or 21A, depending upon their majors and completion of mathematics prerequisites.

In order to begin the testing process, you will first need to file your application online. For testing, you will need a photo ID (such as a driver's license), your El Camino College ID number, and a pen.

After you receive your results, a further review of your placement recommendation may be requested. Information and appropriate petition forms are available from the Assessment/Testing Center.

Mathematics Competency Test

This test covers intermediate algebra and includes some coordinate geometry and trigonometry. If passed, the test may be used to satisfy the El Camino College mathematics competency graduation requirement (item 6 of Section A of the A.A./A.S. graduation requirements).

In order to begin the testing process, you will first need to file your application online. For testing, you will need a photo ID (such as a driver's license), your El Camino College ID number, and a pen. Prior to testing, students must obtain a blue Math Competency Referral Form from the Assessment/ Testing Center and have a counselor sign off on it.

Information and appropriate petition forms for limited re-testing are available in the Assessment/Testing Center.

ATB (Ability-To-Benefit) Test

In order to be eligible to receive financial aid on or after July 1, 2012, students must have a high school diploma or its recognized equivalent, such as a GED or CHSPE. An exception is made for students who have completed a secondary school education in a home school setting that is treated as a home school or private school under state law.

If students were enrolled into an eligible program prior to July 1, 2012, they can qualify for financial aid by passing an Ability-To-Benefit Test or by completing at least six units of post-secondary education. If the Financial Aid Office determines that a student is eligible to take an ATB Test, he/ she will be given a referral form. This form must be presented in person to the Assessment/Testing Center in order to make an appointment to take the ATB Test. All ATB Tests are administered by appointment only.

Waiver Exam for Contemporary Health

A waiver exam is available for Contemporary Health. Contact the Assessment/Testing Center for further information.

Educational Planning

All new students are required to obtain an abbreviated educational plan, which takes into account the students unique experiences and goals to plan the student's first-semester classes. Continuing students are required to complete a comprehensive educational plan by the time they have completed 15 units or by the end of the third semester at El Camino College. The comprehensive educational plan includes all courses required for educational goal completion. Counseling appointments are made online (<https://ecc-portal.elcamino.edu/>). For more information on making a counseling appointment, please see the counseling webpage at www.elcamino.edu/studentservices/co/appointments.asp.

Registration for Classes

Open Enrollment

Unless specifically exempted by statute, every course, course section, or class, wherever offered and maintained by the District, shall be fully open to enrollment and participation by any person who has been admitted to El Camino College and who meets such prerequisites as may be established pursuant to Article 2.5 (commencing with Section 55200) of Subchapter 1 of Chapter 6 of Division 6 of Title 5 of the California Code of Regulations.

Email Accounts and the Portal

Students are required to use their El Camino College assigned email account. This email account is a tool used to communicate with faculty and ECC divisions and for ECC to communicate with students. Student email address is LoginID followed by @elcamino.edu.

For example: john_doe@elcamino.edu

Students must also use **MyECC**, El Camino College's gateway to information about academic and financial aid records, as well as general information about the college. Students may access **MyECC** from the convenience of their home, from a computer lab, or by using one of the college's kiosks. **MyECC** can be accessed at: www.elcamino.edu; click on **MyECC**.

Registration Information

Registration Procedure

Each student is required to have a registration appointment before being permitted to register. It is issued prior to the start of the registration cycle for continuing students and on a first-come, first-serve basis for new and returning students and indicates the day and hour of registration. Registration appointments are issued based on the policy and procedure of the El Camino Community College District. Please refer to Board Policy 5055 and Administrative Procedure 5055. Appointments are available to qualified students who complete the admission requirements.

Students must enroll on the date and time indicated or any time thereafter in accordance with the published registration schedule.

If you are a continuing student on Level II probation status or have earned 100 or more units at El Camino College, a hold will be placed on your registration. Check your unofficial ECC transcripts through **MyECC** and schedule a Student Enhancement Program workshop at the Counseling Center in the Student Services Center.

Schedule of Classes

Before the registration period for each semester or session, the college publishes a Schedule of Classes listing the courses offered, general registration procedures and placement and college ability tests. Schedules are available online at www.elcamino.edu/admissions/schedule.asp and may also be obtained at the Bookstore for a nominal fee. A searchable class schedule showing open and available classes is also available online.

Priority Registration

In compliance with Section 58108 of Title 5, California Administrative Code, priority registration will be implemented as follows:

Limitations

Enrollment in courses and programs may be limited to students meeting properly established prerequisites and corequisites.

Enrollment may also be limited due to the following:

1. Health and safety considerations
2. Facility limitations
3. Faculty workload
4. Availability of qualified instructors
5. Funding limitations
6. Constraint of regional planning
7. Legal requirements imposed by statutes, regulations, or contracts

Registration Priorities

During registration periods, the following registration priority shall be followed:

Priority Level 1 - Eligible students in veterans, foster youth, DSPS, EOPS, and CalWORKs groups

Priority Level 2 - Eligible students in Title 5 sanctioned groups (none at this time)

Priority Level 3 - Eligible students in district designated groups

Priority Level 4 - Eligible in-district new students

Priority Level 5 - Eligible continuing students

Priority Level 6 - Eligible non-district new or returning students

Priority Level 7 - Other new or returning students

Priority Level 8 - K-12 concurrently enrolled students

Priority Level 9 - Continuing students on probation for two consecutive terms and/or continuing students with 100 or more earned units

Priority Level 10 - Reinstated dismissed students

Students within a continuing student priority level will be prioritized by units earned at or through El Camino College and/or Compton College. The more units earned, the higher priority up to an earned unit limit of 100. Continuing students with the same earned unit value will be prioritized randomly.

Students within a new/returning student priority level will be prioritized by the submission date of their application for admissions. New/returning students who applied on the same day will be prioritized randomly.

Eligible new students in Priority Levels 1, 2, 3, 4, and 6 must have completed orientation, assessment, and developed an educational plan. Students should contact Veterans' Services, Foster Youth, DSPS, EOPS, CalWORKs or one of the district-designated groups to receive information on qualifications for those programs and eligibility for priority registration.

Continuous Enrollment for Priority Registration

Continuous enrollment at El Camino College and Compton College constitutes enrollment in the most recent previous semester per academic year, excluding summer or winter sessions. A student must remain enrolled in at least one course for sufficient time to receive a grade of "W" or a letter grade.

For the complete El Camino College Administrative Procedure 5055, Registration Priorities, please go to www.elcamino.edu/administration/board/policies.asp

Priority Level 1 - Veterans and Foster Youth

1. Veterans - any qualified member or former member of the Armed Forces of the United States.
2. Foster Youth - any student qualified to participate in the foster youth program.
3. DSPS - any student qualified to participate in and who receives services from DSPS.
4. EOPS - any student qualified to participate in and enrolled into the EOPS program.

Priority Level 2 - Sanctioned by Title 5 per the California Community College Board of Governors: none at this time.

Priority Level 3 - District-designated Priority Groups The students in level three are members of a cohort approved by the El Camino Community College District Board of Trustees to receive priority registration. For the purposes of priority enrollment, these groups shall be treated equally.

Priority Level 4 - Eligible In-District New Students

1. Any eligible new (first time) in-district student at El Camino College or Compton College
2. Students in this level must meet the deadlines and requirements of the District
3. See the El Camino College Fact Book for in-district high schools

Note: students who were enrolled concurrently in high school and El Camino College in the past are not returning students; they are new students.

Priority Level 5 - Continuing Students

1. Any continuing student at El Camino College or Compton College not disqualified from receiving priority registration by other sections of this procedure.
2. A continuing student is a student who continues enrollment at El Camino College or Compton College without a break of enrollment of a primary term (fall or spring).

Priority Level 6 - Other Eligible New/Returning Students

1. Other eligible out-of-district new students
2. Eligible returning students

Priority Level 7 - New/Returning Students who have not participated in one or more of the required activities (orientation, assessment, development of an education plan) and in the timeframe determined by the District.

1. Other in-district students who have attended another college, but are new to El Camino College
2. Out-of-district new students
3. Students returning to El Camino College after a break in enrollment

Priority Level 8 - K-12 Concurrently Enrolled Students In accordance with the California Education Code, concurrently enrolled students must be assigned low enrollment priority in order to ensure that these students do not displace regularly admitted students. Assignment of the registration appointment time for a K-12 concurrently enrolled student is on a first-come, first-served basis. Each K-12 concurrently enrolled student shall be assigned a registration appointment time based on the submission data of all required documents for admissions (application for admissions, K-12 concurrent enrollment form, and other documents required by law, regulation, and district policy). Failure of a K-12 student to apply and submit all required documents by the college deadline shall result in that K-12 student being denied admission and subsequent registration for that term.

Priority Level 9 - On probation for two consecutive primary terms or have reached the 100-unit limit. Students in this category shall be prioritized randomly.

1. Probation: Continuing students who are on academic or progress probation for two consecutive primary terms.
2. 100-Unit Limit
 1. Continuing students who have earned one hundred (100) or more degree-applicable semester units at El Camino College or Compton College
 2. Exemptions from 100-unit limit: Units for non-degree applicable English as a Second Language or basic skills courses are exempted from the 100-unit limit.

Priority Level 10 - Reinstated from Dismissal

1. Students who have been reinstated following dismissal. Students would have been dismissed for the following: academic dismissal, progress dismissal, or both academic and progress dismissal.
2. Dismissal does not include students who have been expelled or suspended.

Registration Time Allowance

1. Scheduled Appointment Time

All students may register on or after their scheduled registration appointment time, but not before.

2. Failure of the Student to Meet Deadlines or Follow Policy and Procedure

All students must register by the published deadlines and in accordance with the policies and procedures of the district. If a student fails to meet these deadlines or to follow the district's policies and/or procedures, the student will not be allowed to register for courses. A student who attends and participates in a course without proper registration will neither receive credit nor a grade for that course and the backdating of registration will not be considered by the district unless the student can prove that he/she properly registered in a timely manner and it was a college error that caused the registration to fail.

A hold against a student (dean, fee, dismissal, etc.), a failure by the student to apply for admissions for the term in question and by the application deadline, a failure by the student to meet prerequisites or corequisites, an unapproved course overload, a K-12 form or process not properly executed, an admissions hold (residency, AB 540, missing data, etc.) not resolved by the student in the manner and timeframe proscribed by the district shall not be considered to be college error. A student will not be allowed to enroll in a class if there is any time overlap with another class.

A student may not be allowed to enroll in a class if the enrollment violates any of the repeat rules as set forth in Title 5 or in the El Camino College policy and procedure on repeats. Attending and participating in a course without registration, does not constitute college error.

For the complete El Camino College Board Policy and Procedure for Priority Registration please see Board Policy 5055 and Administrative Procedure 5055.

Unit Limitations

The student's program of study will vary according to individual need and objectives. The maximum full-time student program for a semester is 18 units without a physical education class and 19 units with a physical education class. The maximum program of study for the summer session is 10 units if at least one unit is physical education. The maximum program of study for the winter session is 7 units.

The minimum full-time student program is 12 units per semester. A student wishing to take more than the maximum units may file a petition through the Counseling Services Division. Students must have completed at least 15 transferable units in one semester at El Camino College with a 2.75 grade point average and an overall grade point average of 2.5 or higher to be eligible for an overload.

In addition to scheduled class hours, students should include in their weekly schedule the time necessary to study and prepare for classes. Each student is expected to spend two hours per week in study and preparation for each class hour for lecture courses. Students who work in business or industry should reduce their total study programs in proportion to the demands of their employment and personal activities. If employment requires 40 hours or more per week, students would limit their study program to seven units or less each semester.

Full-Time Student

A student is defined as full time if carrying 12 units or more during the regular semester or four units during the summer session.

Veteran and War Orphan benefits under the GI Bill are based on 12 units for full subsistence; nine units for three-fourth subsistence; six units for half subsistence.

For automobile insurance and other insurance benefits, a student must be enrolled in 12 units.

Athletic eligibility is based on 12 units and student government eligibility is eight units.

F and M Visa students must maintain full-time status of 12 units or more. Any exception to this requirement must be approved in advance by a "Designated School Official." An F or M Visa student who drops below 12 units without receiving approval from a "Designated School Official" will be out of status and subject to deportation.

Attendance

Attendance at First Class

Students who enroll in class but do not attend the first scheduled class meeting may be dropped from the roster and their places given to waiting list students. If illness or emergency prevents a student from attending the first class session, the student must contact the instructor.

A student who registers for a class and never attends is still responsible for dropping the class. Failure to properly drop a class by the appropriate deadline may result in a "W" and may hold the student responsible for any and all fees associated with the class. The burden of proof is on the student.

Attendance without Official Enrollment

Students will not be permitted to attend classes in which they are not officially registered. Exceptions may be allowed by the instructor for bona fide visitors. Students who attend a class without proper enrollment (the student did not properly register or add the class) by the published deadline will not be permitted to "late add" the class except for documented extenuating and mitigating circumstances. Students who do not properly register or add a class will receive neither unit nor grade credit for that class.

Attendance during Semester

Students are expected to attend their classes regularly. Students who miss the first class meeting or who are not in regular attendance during the add period for the class may be dropped by the instructor. Students whose absences from a class exceed 10 percent of the scheduled class meeting time may be dropped by the instructor. However, students are responsible for dropping a class within the deadlines published in the class schedule. Students who stop attending but do not drop may receive a failing grade. Students may view their registration status on **MyECC**.

Adding a Class

If space is available, students who have completed registration may add a class by going to the first meeting of the class and securing permission of the instructor. It is the responsibility of the student to fulfill all requirements to add a course, and to add the course by the add deadline in accordance with college procedures. Adds will not be processed beyond the add deadline.

Filled and Cancelled Classes

Because many classes fill quickly in the registration process, students should enroll for classes as soon as their appointment time allows. Students who wish to take a pre-collegiate basic skills course that is a required prerequisite and all sections of that basic skills course are filled, may petition to have the prerequisite course waived for that particular term. Guidelines and forms for requesting a waiver of a prerequisite are available in the counseling office in the Student Services Center.

All classes scheduled at El Camino College are subject to cancellation. Although the college makes every effort to run each class that is scheduled, occasionally a class must be canceled due to insufficient enrollment or to the unavailability of an instructor.

Withdrawal from Class

Official withdrawal from class must be processed through the **MyECC** student portal. Failure to complete this process may result in the assignment of a letter grade of A through F.

Dropping a Class

It is the responsibility of the student to officially drop a class by the deadline date. If a student fails to drop by the deadline, the student may be subject to a substandard grade, a withdrawal "W," and incur all relevant fees.

Attendance by Non-registered Students

Only those students registered in a class may attend the class. Students who have completed the proper auditing procedure are allowed to attend without receiving grades or unit credit. No others may attend, including children of students.

Auditing of Courses

Education Code Section 76370 permits the Board of Trustees to authorize a person to audit a community college course.

A student may audit selected El Camino College courses with following provisions:

1. Priority in class enrollment shall be given to students desiring to take the course for credit toward a degree or certificate. Auditing a course is on a space-available basis.
2. No student auditing a course shall be permitted to change his or her enrollment in that course to receive credit for the course. Students will not be permitted to earn credit by examination for audited courses.
3. A student wishing to audit a course must first obtain a petition to audit form in the Admissions Office. Registration for audit will occur no sooner than the second week of classes.
4. The audit of a class is subject to the approval of the instructor of the course and the dean of the academic division. Neither the instructor nor the dean is obligated to approve an audit.

Fee for auditing a class shall be \$15 per unit per semester (subject to change). Students enrolled in classes to receive credit for 10 or more semester credit units shall not be charged a fee to audit three or fewer semester units per semester. Fees are to be paid before attending the class and are non-refundable.

Children in Classrooms

Children are not permitted in classrooms while class is in session. Attendance in class is limited to officially enrolled students and authorized visitors and guests only. Students shall not allow children to be left unattended or unsupervised anywhere on campus. It is the responsibility of each faculty member to inform students of this requirement.

Student Fees/Refunds/Credits

Enrollment Fee

El Camino College has a strong commitment to ensuring accessibility to all of its programs and services to all students who are capable of benefiting from such programs and services. A limited number of related services, which the student uses, shall be supported by fees charged to students to assist in defraying the costs of providing these services.

The mandatory general course enrollment fee will be collected at the time of registration. Students who fail to pay this required fee at the time of registration may subsequently be dropped from all classes. Students who are not dropped from courses for non-payment are still liable for all fees unless the student drops the courses by the refund deadline (see Refund section at right). It is the student's responsibility to pay all fees or to drop themselves from their courses by the deadline dates. All fees, including any optional fees, such as a Parking Permit or ASB Student Discount Sticker that may have been requested at the time of registration must be paid by the deadline.

Students on a waitlist for a class must check their El Camino College email DAILY to find out if they have been admitted to the class. If students are admitted to a class from the waitlist, they must pay those class fees on or before the next scheduled deadline period or they will be dropped from all classes, including those already paid for.

It is the student's responsibility to keep informed of his or her waitlist status and to pay any fees due by the scheduled deadlines.

Grades, transcripts and diplomas will be withheld and future registration restricted for any student who has any outstanding fees. The enrollment fee is \$46 for each unit of credit (subject to change).

El Camino College is part of the system of public higher education of the State of California. The information in this section may be subject to change as a result of new state legislation or requirements of the California Community Colleges Chancellor's Office after the publication date of this catalog.

The enrollment fee requirement shall not apply to students enrolled in the non-credit courses specified in Education Code Section 84711.

A student who is in the Temporary Assistance for Needy Families (TANF) Program, the Supplemental Security Income/State Supplementary Program (SSI/SSP), or the General Assistance Program in the Financial Aid Office must apply for the Enrollment Fee Financial Assistance programs prior to the close of the term in the Financial Aid Office. If any additional documentation is required, it must be submitted to the Financial Aid Office and completed prior to the close of the school term. (Board Policy 5030.2.)

All students interested in applying for financial aid or receiving financial aid need to refer to the financial aid and scholarship section of this catalog.

Refund of Enrollment/Parking Fees

To receive a refund, students must drop their classes through the online system, **MyECC**, according to dates published in the schedule of classes and listed on fee receipts.

Classes that meet fewer than 15 weeks must be dropped by the end of the first full week of classes. Refer to the deadline dates on the fee receipt and in the Schedule of Classes.

To receive a refund for a parking permit, students must return the permit to the Cashier's Office within the time period specified in the class schedule. Refund checks will be mailed by the midpoint of the semester.

If a mailing address has changed, please update the change in the Admissions Office.

A refund fee not to exceed \$10 may be charged for enrollment refunds.

Fee Payment Methods

Fees may be paid by cash, money orders or personal checks drawn on United States banks only. VISA, Discover and MasterCard credit cards will be honored. Checks returned by a student's bank for any reason will result in (1) suspension from enrollment, (2) denial of subsequent registration, and (3) detention of transcript until financial obligation has been satisfied. A service charge of \$20 will be assessed on any returned check.

Health Services Fee

In accordance with the California Education Code, Section 72246, students pay \$20 each semester (and \$17 per summer term) to cover the operation, supervision, programs and services of the Student Health Center. There are exceptions under these conditions:

1. Students receiving financial aid pursuant to Section 72252.1.
2. Low-income students who meet the Board of Governors Grant criteria (pursuant to Section 72252) as demonstrated by appropriate support documentation of eligibility; SSI eligibility; or GA eligibility; Veterans Affairs Dependent Fee Waiver Certification; Agency Certification or Income Tax form as they relate to qualifying income levels; or a combination of these and unmet student need as determined by the Financial Aid Office.
3. Students who depend exclusively upon prayer for healing in accordance with the teachings of a bona fide religious sect, denomination or organization.

Exemptions: Students enrolled only in classes held off campus, distance education classes only, non-credit classes only or worksite classes, high school students, or students enrolled in contract classes will not be required to pay the Health Services Fee.

Refund: Students who withdraw from all courses prior to the close of the second week of the term will be eligible for a refund of the Health Services Fee.

Non-Resident Fee

In addition to the general student fees, an out- of-state United States citizen or citizen of another country is charged a non-resident fee of \$270 for every credit unit (subject to annual change each fall semester). A resident is defined as a citizen of the United States or a person who holds a status which allows him/her to establish residency in the United States, and can provide evidence of physical presence in the state of California for at least one year prior to the residency determination date, and evidence of intention to make California his/ her permanent home. Dates on any documentary evidence should correspond to dates of physical presence in California. A non-resident is a person who does not meet the residency requirements of the state of California or who is a citizen of a foreign country and holds only temporary status in the United States. El Camino College maintains a list of exceptions to the non-resident fee requirement. Such a list will be issued by the Admissions Office to each student who is classified as a non-resident.

Consideration is given to appropriate evidence submitted by the student to substantiate a change in this classification. Possible changes could go to students in the active United States military services or to those who are dependents of an active member of the United States military.

El Camino College requires a \$50 (subject to change) application processing fee for out-of-country applicants.

The application fee must be paid by check or money order drawn on a United States bank or by cash. Checks drawn on out-of-country banks will not be honored.

Non-Resident Tuition Fee Refund

Students will receive a full or partial refund for non- resident tuition if they drop their classes through the online system on the web according to the following schedule.

1. During the first calendar week of the semester, 100 percent of the fee will be refunded.
2. During the second calendar week of the semester, 75 percent of the fee will be refunded.
3. During the third calendar week of the semester, 50 percent of the fee will be refunded.
4. During the fourth calendar week of the semester, 25 percent of the fee will be refunded.

Refunds for the summer sessions and for short-term courses of 16 weeks or less will be granted if classes are dropped according to the following schedule:

1. During the first calendar week of the term, 100 percent of the fee will be refunded.
2. During the second calendar week of the term, 50 percent of the fee will be refunded.

Parking Fee

Anyone wishing to park on campus will pay a parking fee each semester in accordance with Education Code Section 72247. This fee is \$35 per semester for automobiles. The parking fee for motorcycles is \$20 per semester. The parking fee for the summer term is \$20 for automobiles or motorcycles. Students who are awarded a Board of Governor's fee Waiver (BOGW) pay \$20 a semester for a parking permit. Visitors must also pay a \$3 parking fee by purchasing a daily parking permit, available from permit machines located in the parking lots. Traffic and parking regulations are posted throughout campus. ECC Police will issue citations to violators of these regulations. Parking violations are a minimum of \$40.

Students/visitors with disabilities who have been issued a DMV Disabled Person (DP) placard may park in any designated disabled person-parking stall. Disabled persons may park in faculty/staff/ student space and MUST DISPLAY the DMV disabled person placard/plates AND a valid El Camino College semester or daily parking permit when parked. Failure to display the DP placard and a valid El Camino College or Compton College permit (when parked in faculty/staff/student space) will result in the issuance of a citation. See California Code of Regulations - Title 5, Section 54100, Ed Code 67301(a). Temporary medical parking arrangements can be made at ECC Police/Parking Services.

Red and white lettered marked stalls are made available to El Camino Community College District directors, deans, and other management personnel for a fee through the Business Manager's Office. Although located in general staff lots, they are for the exclusive use of the individuals paying the fees. All others occupying these stalls are subject to citation.

Transcript of El Camino College Record

A transcript of the student's academic record at El Camino College will be furnished upon request by the student only, online at www.elcamino.edu/admissions/transcripts.asp. A delay in mailing the transcript may result if a student has outstanding fees or fines against his/her record (library, laboratory, physical education locker, supplies or returned checks). Academic work completed at other colleges will not be included on or with the El Camino College transcript. Academic transcripts and documents from other colleges must be requested from those colleges. The first two El Camino College transcripts are free.

Student Support Services

ASO Student Discounts & Student Activities Fee

The Associated Students Organization (ASO) Student Activity Discount Sticker entitles students to receive discounts for El Camino College athletic events, Center for the Arts events, apparel at the El Camino College Bookstore, select local restaurants/businesses, and admission to participating movie theaters and amusement parks. Discounted tickets may be purchased at the Marsee Auditorium Ticket Office. The ASO Student Activity Discount Sticker financially supports activities such as student government, student clubs, student newspaper, speech and debate team, performing arts, and athletic teams.

The ASO Student Activity Discount Sticker is \$15 each fall and spring semester. Students are charged this fee each semester at the time of enrollment. The ASB Student Activity Discount Sticker is not available for purchase during the summer term; however, the sticker is valid until the start of fall term.

Students may choose to decline purchasing the ASO Student Activity Discount Sticker when paying their fees online or at the Cashier's Office. Students have until the last day of the add/drop period of full-term courses to decline purchasing the ASO Student Activity Discount Sticker and receive a refund. After this date, students will be unable to decline the purchase of the ASO Student Activity Discount Sticker or receive a refund.

Assessment/Testing Center

The Assessment/Testing Center is located in Room 217, on the second floor of the Student Services Center building. English, English as a Second Language (ESL) (Part 1) and mathematics placement testing are computerized and available on a drop-in basis according to posted hours. Placement into classes is based upon test scores and other multiple measures.

In addition to English, ESL (Part 1), and mathematics placement tests, the Assessment/Testing Center also administers the following exams: Ability-to-Benefit (ATB), chemistry placement, contemporary health, English as a Second Language (Part 2), and mathematics competency. Contact the Assessment/ Testing Center for further information or refer to the El Camino College Assessment/Testing webpage at www.elcamino.edu/studentservices/assessmenttesting/.

Bookstore Services

The El Camino College Bookstore is located on the north side of campus, adjacent to the staff parking lot off the Manhattan Beach Boulevard entrance at Lemoli Street. The bookstore is owned and operated by El Camino College. Regular hours are Monday through Thursday, 7:30 a.m. to 6:00 p.m.; and Friday, 7:30 a.m. to 4:00 p.m.

Textbooks can be returned for a full refund during the first week of the fall and spring semesters. Textbooks purchased for summer sessions can be returned the first three days of the sessions for a full refund. Textbooks must be in the original condition and a student must have his/her register receipt for a full refund. Contact the Bookstore for further refund information.

The Bookstore buys books back on a daily basis. The best time to sell books is during the last week of a semester or session. The Bookstore will pay up to 50 percent of the original cost on textbooks that are being used for the next term.

Textbooks may be purchased online at www.elcamino.edu/student/services/bookstore.asp. Click on the Bookstore and order textbooks for home delivery or in-store pickup.

Proceeds from the Bookstore are used to support the Auxiliary Services Fund and site improvement projects on campus.

California Work Opportunity and Responsibility to Kids Act (CalWORKs)

The ECC CalWORKs Parents Program is dedicated to assisting parents with children who are currently receiving Temporary Assistance for Needy Families (TANF). Our goal is to help you obtain a vocational certificate, associate degree, or transfer to a four-year university in order to attain sustainable employment and become self-sufficient. CalWORKs provides academic support and services including, but not limited to, academic counseling, career advisement, priority registration, temporary childcare, transportation assistance, meal service and assistance with the completion of Department of Public Social Services (DPSS) documentation to meet welfare-to-work requirements. We also offer CalWORKs Work Study positions on campus and off campus in order to help you gain valuable work experience as you attend school.

In order to apply for the CalWORKs Program please visit our office to pick up an application and an eligibility form to take to your GAIN Worker. For additional information visit our webpage at <http://www.elcamino.edu/student/student-services/calworks/>

CalWORKs Program

Student Services Center

Telephone: 310-660-6057

Email: calworksinfo@elcamino.edu

Career Center Services

Career Center services are offered Monday through Thursday, 8:00 a.m. to 7:00 p.m. The Career Center is located in the Counseling Offices on the first floor of the Student Services Center. Opportunities for extensive career planning and assessment of interests, personality, skills, and values are available.

Career exploration and workshops are also offered for vocational and pre-professional planning and job success.

Appointments for career exploration, assessments and counseling are available to current students and alumni. Career fairs, tours, workshops, and career orientations are scheduled throughout the year.

The Career Center has information, including books, online career resources, career-related material, and computerized career information systems, describing thousands of jobs and providing information on local, state, and national job markets and trends.

For more information, please call 310-660-3593, ext. 6137.

Cashier's Office

The Cashier's Office is located on the first floor of the Bookstore Building and is open Monday through Thursday, 8:00 a.m. to 6:00 p.m.; and Friday, 8:00 a.m. to 1:00 p.m. Students may pay fees, obtain class printouts, purchase parking permits and the Associated Students Organization (ASO) activity sticker. Students may purchase discounted theater and amusement park tickets at the ticket office, located at the Marsee Auditorium.

Cooperative Agencies Resources for Education (CARE)

The CARE Program is dedicated to the delivery of a comprehensive program that encourages the enrollment, retention, graduation, and transfer of students who are single heads of household, at least 18 years of age, have a child(ren), and who receive CalWORKs/Temporary Assistance for Needy Families (TANF) for themselves and/or their child(ren). The CARE Program provides academic and financial support services including, but not limited to, specialized advising services, grants, transportation assistance, meal service, school supplies, and much more.

In order to apply for the CARE Program, students must be eligible for the Extended Opportunity Programs and Services (EOPS), a California resident/ AB540 or AB1899 student, be enrolled in at least 12 units upon acceptance into the program, and submit a CARE Agency certification from.

For additional information visit our website at <http://www.elcamino.edu/student/services/care/index.aspx>.

CARE Program

Student Services Center
Telephone: 310-660-6066
Email: careinfo@elcamino.edu

Counseling Services

Counseling services are made available to students through scheduled appointments. Appointments to meet with a counselor are made one week in advance through the **MyECC** student portal. A student who has selected a major area of study is strongly encouraged to see one of the counselors assigned to that area; an undeclared or undecided student may see any counselor.

As an integral part of the Student Success Support program, counseling services are designed to assist students in clarifying career and life goals and in developing an appropriate course of study based on a student's aptitudes, interests, and goals.

Express Counseling is available Monday through Thursday, 8:00 a.m. to 7:00 p.m.; and Friday, 9:00 a.m. to 1:00 p.m. for students who have questions that do not require transcript review.

Extended Opportunity Programs and Services (EOPS)

The EOPS Program is dedicated to the delivery of a comprehensive program that encourages the enrollment, retention, graduation, and transfer of students who are challenged by language, social, economic, and educational disadvantages. The EOPS Program provides academic and financial support services including, but not limited to, academic counseling, priority registration, grants, book vouchers, school supplies, tutoring, and much more.

In order to apply for the EOPS Program, students must be a California resident /AB540 or AB1899, be enrolled in at least 12 units upon acceptance into the program, be considered educationally disadvantaged as defined by Title 5, have less than 70 degree applicable units completed, and qualify for the California College Promise Grant (SBOG- Method A, B, or C with zero Expected Family Contribution).

For additional information visit our webpage at <http://www.elcamino.edu/student/student/services/eops/>

EOPS Program

Student Services Center
Telephone: 310-660-3466
Email: eops@elcamino.edu

Financial Aid

El Camino College offers a variety of financial aid programs to help students with education-related expenses. These include grants, employment (Federal Work-Study), and scholarships.

Detailed information, application forms, and professional financial aid advising are available in the Financial Aid Office in the Administration building. Assistance with applications is also available in the Financial Aid Computer Lab located in the Student Services Center.

To qualify for financial aid and maintain eligibility for the programs, federal and state regulations indicate that you must:

1. Apply for financial aid using the Free Application for Federal Student Aid (FAFSA), the renewal FAFSA, or online at www.FAFSA.ed.gov.

2. Be a United States citizen, permanent resident, or eligible non-citizen.
3. Be a high school graduate or have completed the GED or passed the High School Proficiency Examination.
4. Be enrolled and in good standing.
5. Maintain Financial Aid Satisfactory Academic Progress.
6. Demonstrate financial need.
7. Be registered with Selective Service if you are a male between 18 and 25 years old and not a current member of the active armed forces.
8. Not be in default on any educational loan and not owe a refund on a grant received for attendance at any post-secondary institution.

AB540 Students

California State Assembly Bill 131 (AB 131) allows for any student who meets AB 540 eligibility criteria to apply and receive, if eligible, state-based financial aid at all California public colleges and universities. State-based financial aid includes the Board of Governors Fee Waiver (BOGFW), Cal Grants, and Chafee Grants.

Complete the Dream Act Application at http://www.csac.ca.gov/dream_act.asp

Federal Refund Requirements

Students who withdraw from all classes prior to completing 60 percent of the semester will have their financial aid eligibility recalculated. Based on the percentage of the semester completed, students will be required to repay any unearned financial aid they received.

At El Camino College, a student's withdrawal date is:

1. the date the student officially notified the Admissions Office of his or her intent to withdraw, or
2. the student's last date of attendance at a documented academically related activity.

Students who receive Federal Pell Grant and are dropped as "No Show" by instructors will be required to repay the entire amount they received.

Cal Grant B

Cal Grant B awards range from \$418 to \$1,670 at community colleges. This grant provides subsistence payments for entering freshmen with no more than one semester full-time or 16 units of part-time coursework completed. The funds may be applied toward living expenses, books, supplies, and transportation.

Cal Grant B Entitlement Award

This award is for graduating high school students and students who graduated high school during the previous year who have at least a 2.0 grade point average. Students in this category must also fall within certain family income and asset ceilings. Students must apply within a year of graduating and meet the March 2 deadline for filing the FAFSA and GPA Verification Form.

Cal Grant C Information

Cal Grant C awards assist students in occupational career training programs with paying tuition costs for students enrolled at community colleges. Selection is based on GPA, education and employment history, vocational aptitude, and financial need. Course length must be at least four months. Cal Grant C is not for students pursuing a four-year college degree.

California Chafee Grants

The California Chafee Grant Program awards up to \$5,000 a year for vocational and technical training or college for current or former foster youth. To apply, complete the Free Application for Federal Student Aid (FAFSA) and the California Chafee Grant application, which is available online at <http://www.chafee.csac.ca.gov>

Child Development Grant

The Child Development Grant Program is designed to encourage students to enter the field of child care and development in a licensed children's center. Students must be enrolled at least half time in coursework leading to a Child Development Permit. Eligible students may receive up to \$1,000 per year.

Federal Pell Grant

The Federal Pell Grant is a federally funded program that assists students in paying for their education after high school. The Federal Pell Grant awards for full-time students range from approximately \$600 to \$5,920 a year. Federal Pell Grant awards are available only to students who have not received a bachelor's degree.

Federal Supplemental Educational Opportunity Grant

The Federal Supplemental Educational Opportunity Grant is a federal program designed to supplement other sources of financial aid for students with exceptional need who are eligible for a Federal Pell Grant. FSEOG awards range from \$100 to \$600 per year, depending on need and availability of funds.

Aid for Native Americans

Native American students are entitled to receive educational assistance from the Bureau of Indian Affairs. Applications for BIA grants and vocational assistance are available from U.S. Bureau of Indian Affairs regional offices or online at <http://www.bie.edu>.

Federal Work Study

The Federal Work Study Program provides funds for part-time employment to help needy students finance the costs of postsecondary education. Students may earn at least minimum wage and work 20 hours a week. Funding is based on financial need and available funds.

California College Promise Grant - Special Classifications

Students who are recipients of the Congressional Medal of Honor or dependents of an honoree, dependents of victims of the September 11, 2001 terrorist attack, or dependents of deceased law enforcement/fire suppression persons killed in the line of duty are eligible for a Special Classification fee waiver. Students with certification from the California Department of Veterans Affairs or the National Guard Adjutant General are also eligible for a waiver.

California College Promise Grant - Method A

For this waiver, students must be receiving TANF, SSI, or General Assistance and be legal residents of California. The CCPG application must be completed and a copy of a current monthly check or Untaxed Income Verification form must be submitted. Students are awarded up to \$46 a unit per semester, based on enrollment status. This is not a cash award to students but is simply a waiver of enrollment fees. Eligible students are not required to pay health fees. To maintain eligibility for the waiver, students must meet academic and progress standards by maintaining a cumulative grade point average (GPA) of 2.0 and must complete more than 50 percent of courses attempted.

California College Promise Grant - Method B

For this waiver, students must meet low-income criteria and be legal residents of California. The CCPG application must be completed and a copy of the prior year's federal tax return may be requested. Students are awarded up to \$46 per unit per semester, based on enrollment. This is not a cash award to students, but is simply a waiver of enrollment fees. The Board of Governors reserves the right to change the enrollment fees and the adjusted gross income financial limits every year. Please check with the Financial Aid Office or the webpage for current year information. To maintain eligibility for the waiver, students must meet academic and progress standards by maintaining a cumulative grade point average (GPA) of 2.0 and must complete more than 50 percent of courses attempted.

You will be asked to provide documentation of income.

California College Promise Grant - Method C

For this waiver, students must demonstrate financial need at a minimum of \$1,104 and be legal residents of California. Eligibility is based on the completed FAFSA. Students are awarded \$46 a unit per semester based on enrollment status. This is not a cash award to students, but is simply a waiver of enrollment fees. To maintain eligibility for the waiver, students must meet academic and progress standards by maintaining a cumulative grade point average (GPA) of 2.0 and must complete more than 50 percent of courses attempted.

This information is subject to change pending new regulations. Please check with the Financial Aid Office for any changes in eligibility.

Guardian Scholars Program

The El Camino College Guardian Scholars Program creates a welcoming and supportive environment for current and former foster youth. Our goal is to empower foster youth to reach their full potential and achieve academic, personal, and career goals. Guardian Scholars promotes self-advocacy by establishing meaningful connections and a support network within the El Camino College campus community.

The Guardian Scholars Program provides the opportunity to change individual lives and make dreams come true. For additional information visit our webpage at <http://www.elcamino.edu/student/studentservices/guardianscholars/>

Guardian Scholars Program

Student Services Center
Telephone: 310-660-3466
Email: kedaniel@elcamino.edu

Library & Learning Resources

Learning Resources Center (LRC)

The Learning Resources Center is dedicated to helping students of El Camino College achieve their academic goals. The LRC offers academic support services and resources - tutoring, instructional software for basic reading and math, media materials, and open-access computer labs - at no cost to all El Camino College students. All LRC services located in the library are open during library hours. For additional information, visit www.elcamino.edu/library/lrc or call 310-660-3511. The LRC programs are located in the following areas:

The Library Media Technology Center (LMTC)

The Library Media Technology Center, located in the library basement, is El Camino College's general-use computer lab with over 130 computers. The LMTC has fully networked Windows-based computers, color and laser printing, scanning, adaptive access tools, and internet access. Software includes word processing, database, spreadsheet, presentation, and graphics programs. Students may also use a variety of software programs for specific disciplines.

The Basic Skills Study Center (BSSC)

The Basic Skills Study Center, located on the second floor of the library, has 138 computers for students to use if they have an El Camino College student ID card with a current term sticker. This area also has individualized computer-assisted instruction in basic reading and math. Students will be given a diagnostic placement test and a personal study plan.

The Learning Resources Center (LRC) Tutoring Program

The Learning Resources Center Tutoring Program, located on the second floor of the library, offers free drop-in tutoring for many subjects including, but not limited to, English, ESL, mathematics, chemistry, business, biology, music, and foreign languages. All tutoring is provided by trained tutors. Any registered El Camino College student may meet with a tutor on a drop-in basis. Reservations are not required. The current tutoring schedule is posted in the Learning Center and at: www.elcamino.edu/Library/lrc/tutoring. Free online tutoring is also available for students when they cannot meet face-to-face with a tutor or a tutor is not available. To register and use this service, go to www.nettutor.com/ecc.

The Learning Center

The Learning Center, located on the second floor of the library, houses a media-materials collection to supplement instruction in many academic disciplines. The collection includes disarticulated skeletons, human anatomy models, maps, text materials, and DVDs. Equipment is also available for viewing videos and DVDs.

Library

<http://www.elcamino.edu/library>

Fall / Spring Hours

Mon - Thurs 8:00am - 9:00pm

Fri 8:00am - 4:30pm

Sat 9:30am - 2:30pm

Winter / Summer hours may vary.

Schauerman Library is a hub for research, study space, and learning that supports student success with a wealth of resources. The Library contains both quiet study spaces and collaborative work areas, with group study rooms available for checkout.

The **Circulation and Reserves Desk**, located in the Main Lobby is where students can check out textbooks, books from the general collection, and access back issues of periodicals. The library does not have every textbook for all ECC courses and relies on faculty donations to provide them for student use. Textbooks may be borrowed for two hours at a time, and copy machines are located nearby so that students may replicate portions of text for homework purposes. Make sure to bring your ECC ID to check out materials and for making copies. You may get your student ID card activated here.

At the **Reference Desk** on the main floor, Librarians will work with students on research skills and citations while also providing guidance in navigating a college library environment. Ask a librarian where to locate any one of thousands of books, periodicals, newspapers, or online databases that the Library provides for the ECC community. Teaching computers are located at the Reference Desk so that students and librarians may work together on research.

The **Learning Resources Center** has two computer labs with printers for students to use during regular library hours. The Library Media Technology Center (LMTC) computer lab is located on the library's east basement. The Basic Skills Study Center lab (BSSC) is on the 2nd floor of the west wing. Students may print black and white copies for 10 cents per page and 50 cents per page for color copies at both locations. Computers may be reserved for classes and campus programs.

Tutoring, located on the library's second floor, is available for many subjects such as English, ESL, mathematics, chemistry, business, biology, music, and foreign languages. Tutoring is free and no appointment is necessary. Free online tutoring is also available for students who are enrolled in online classes. For more information and a current tutoring schedule, go to <http://www.elcamino.edu/library/lrc/>

The **Music Library** is located in MU-126 in the Music Building. This special library is focused on providing resources in music performance and technique, music literature, and music history. In addition to serving the hundreds of music students who make up the Music department's unique learning community, the Music Library's services and resources are available for all ECC students, faculty, and staff. The Music Library houses a small computer lab with copy/printing services, and music practice rooms each equipped with a piano, music stand, and listening station. During the fall and spring semesters, the Music Library is open the same hours as the Schauerman Library; and from 9:00 a.m. to 1:00 p.m. on Saturday. Summer and winter term hours vary. The Music Library is closed when classes are not in session.

Photo Identification Card

All El Camino College students are encouraged to obtain a free student photo identification card. The student photo identification cards are available in the Student Activities Center. Hours of operation vary; please call the Student Development Office at 310-660-3593 ext. 3500 for information. The cards serve as photo identification and are required for library and lab services, campus activities, and for verification of attendance in certain classes. Student photo identification cards are also needed to use any campus computers.

RISE Center

Responsive to the needs of students

Innovative strategies for success

Synergetic and working together through collaboration

Engaging students, faculty and the community

The RISE Center is committed to being an active participant in students' educational experience so that they receive the support and attention to be successful academically. Working collaboratively with other academic and student support services, the RISE Center offers a variety of services and activities to support student success including workshops, academic counseling, a computer lab and referrals to resources on and off campus. The RISE Center is located on the second floor of the Student Services Center, room 213. The RISE Center telephone number is 310-660-3593 ext. 7800.

Scholarships

The El Camino College Foundation serves the needs of El Camino College students by providing financial resources to assist with their education. The most direct student support is through scholarships. Thanks to the generous support of individuals, businesses and corporations in our community, El Camino College Foundation awards more than \$600,000 annually. Current students continuing their education at El Camino College, incoming high school students, and students transferring to four-year colleges and universities are eligible to apply for El Camino College scholarships.

The El Camino College Scholarship online application period takes place during the fall semester. Scholarships are awarded in the spring to be activated the following fall semester. Students may apply through the **MyECC** Portal at www.elcamino.edu/student-services/fao/main_scholar.asp and click the link titled "Scholarship Application." Six graded units and a minimum cumulative GPA of 2.0 are required to apply. Students must complete the online application and submit a faculty letter of recommendation to be eligible. High school students interested in applying for the Foundation's high school scholarships should contact their high school counselors.

In addition to the scholarships offered by the El Camino College Foundation, the Scholarship Office provides information on a vast number of outside scholarship opportunities. For questions or additional information about the scholarships that are available or for assistance applying for a scholarship, please contact the Scholarship Office at 310-660-6541 or visit the Scholarship Office located in Administration 119 or online at www.elcamino.edu/student-services/fao/main_scholar.asp.

Special Resource Center

The mission of the El Camino College Special Resource Center (SRC) is to facilitate academic success for students with disabilities by providing equal access to educational opportunities in an integrated campus setting.

Students with disabilities are an integral and vital part of the El Camino College community. The SRC provides support services, adaptive equipment, computer technology, and specialized instruction to serve students with verified disabilities. The SRC provides accommodations for both academic and extracurricular college activities. The SRC's primary goal is to provide accommodations necessary to assist students with achieving their educational and vocational goals while promoting self-advocacy and independent learning. The SRC Office promotes shared responsibility with the student, instructor, and college staff for student success. The assistance provided by the SRC is in addition to services and instruction otherwise available to all students.

In order to be eligible for support services, equipment, or instruction, a student must have verification of his/ her disability.

Support services are provided on an individual basis as agreed during consultation with a counselor or specialist. Services may include: registration assistance; educational development courses, academic or vocational counseling; educational and diagnostic assessment; American Sign Language and oral interpreting; Braille transcribing; alternate format materials; student skill assistance; testing accommodations; or equipment loans. Support services are directly related to the educational limitations of the verified disabilities of the students to be served. Support services promote the maximum independence, integration, and participation of students with disabilities in the educational process and activities consistent with the mission of El Camino College. (Please refer to ECC Board Policy 1600).

Special classes are available with curriculum designed to provide specialized instruction for various types of disabilities and learning styles. These special classes are listed under Educational Development in the catalog. The Adapted Physical Education Program (APE Program) is available for students who may benefit from physical education offerings with adaptation and personalized instruction. These activity courses are listed within the Physical Education section of the catalog and schedule of

classes. For information on special class repetition, refer to "Course Repetition Policy and Active Participatory Course Limitations" located in the Academic Regulations section of this catalog.

All students seeking admission to El Camino College must meet these levels of independence:

1. The ability to negotiate the campus facilities independently or with the assistance of their own equipment or attendant
2. The possession of a stable level of health to benefit from a full semester's work

The SRC does not provide assistants for personal use.

The Special Resource Center is located on the east side of the Student Services Center. Please visit or contact us.

- Telephone: 310-660-3295; 310-660-3445 TTY; 424-236-6264 Videophone
- Webpage: www.elcamino.edu/academics/src

Student Health Services

Student Health Services is located on the south side of campus, adjacent to the swimming pool.

The Health Center is staffed by nurse practitioners, registered nurses, physicians, and clinical psychologists. Some of the free services provided are general medical care and treatment, first aid, family planning, and health education. Lab services such as Pap smears, blood tests, or pregnancy tests are available at low to no-cost.

Short-term psychological counseling on an individual basis by psychologists is free of charge. Workshops on health-related issues such as stress management, test anxiety, assertiveness training, improving communication skills and anger management are also offered through Student Health Services.

Health services are provided for enrolled students 18 years of age or older who have paid the mandatory student health fee, and are currently attending classes. High school students permitted to attend the college on a concurrent enrollment basis are not eligible for health services. College students under 18 years of age subject to other admissions criteria must pay the student health fee and submit a parental or guardian consent form to receive most clinical services.

Please see the Student Health Services webpage for hours and workshops for current semester:

<http://www.elcamino.edu/student/studentservices/health/>

Student Services Center

The Student Services Center building includes Admissions and Records, Counseling Services, Transfer and Career Services, and the Special Resource Center on the first floor. The CaWORKs/CARE, EOPS, First Year Experience, Outreach and School Relations, and the Assessment/Testing Center are on the second floor. The Information Desk in the foyer, staffed during most hours the building is open, has a variety of information available including campus maps and brochures and other information on courses, special events, and campus activities. Building hours are Monday through Thursday from 8:00 a.m. to 7:00 p.m. and Friday, 9:00 a.m. to 1:00 p.m.

Transfer Center

Transfer services are offered Monday through Thursday from 8:00 a.m. to 7:00 p.m. in the Counseling Offices on the first floor of the Student Services Center building. The Transfer Center offers a wide range of services and activities designed to assist students in transferring successfully to the four-year college or university of their choice.

Among the transfer services offered are professional transfer counseling and advisement, regularly scheduled visits by recruiting and admissions officers from four-year colleges and universities, and workshops on major steps in the transfer process. Other activities offered include university fairs on the El Camino College campus and frequent field trips to an array of major universities. A calendar of Transfer Center activities is published monthly and is widely distributed. A transfer guide is published annually. Information about public and private colleges and universities is available through the Transfer Center. Visit online at www.elcamino.edu/studentservices/co and click on Transfer Services to find the latest information on fairs, tours, and workshops. In addition, find the latest information about the benefits of earning an Associate of Arts/Associate of Science Transfer Degree (AA-T/AS-T), and UC Transfer Admission Guarantee (TAG) Programs.

Tutorial Services

The Learning Resources Center Tutorial Program located on the second floor of the library, offers free drop-in tutoring for many subjects including, but not limited to English, ESL, mathematics, chemistry, business, biology, music, and foreign languages. All tutoring is provided by trained tutors. Any registered El Camino College student may meet with a tutor on a drop-in basis. Reservations are not required. The current tutoring schedule is posted in the Learning Center and at www.elcamino.edu/Library/lrc/tutoring. Free online tutoring is also available for students when they cannot meet face-to-face with a tutor or a tutor is not available. To register and use this service, go to www.nettutor.com/ecc.

Veterans Services

The US Department of Veterans Affairs (VA) provides education benefits to veterans, service persons, those in the National Guard or active reserves, and eligible dependents and survivors of totally disabled or deceased veterans under a number of benefit programs. Students eligible for these benefits must apply for them each semester through the El Camino College Veterans Services Center, located in the Admissions Office Student Service Center Room 105, telephone number 310- 660-3486. The Veterans Resource Center can be found in the breezeway between the Student Services Center and the Student Activities Center, Room 105A. With a counselor-approved educational plan, the El Camino College Veterans Office certifies courses required for a certificate program, the associate degree, and for transferable four-year degrees on behalf of VA.

Students collecting VA educational benefits must achieve satisfactory progress. If the student falls below graduation standards (2.0 GPA) or is on progress probation for two consecutive semesters, El Camino College is required to notify the VA. The VA will terminate benefits unless it can be shown that the student is pursuing an appropriate objective and has a reasonable chance for success in the chosen program.

Veterans with service-connected disabilities may be eligible for a special vocational rehabilitation and employment program offered by the VA. Contact the local VA office for more information at 1-800-827-1000.

Because timely receipt of benefit checks cannot be assured by the VA, especially at the beginning of each semester, students should not depend on them for their beginning of the semester expenses. It is also the responsibility of the student to notify the El Camino College Veterans Office of any change in unit load during the semester.

For more information about VA Education Benefits, call the VA the Education Service line at 1-888-442- 4551, or go to www.gibill.va.gov.

The California Department of Veterans Affairs (CALVET) provides a tuition waiver program to eligible dependents and survivors of disabled and deceased veterans. Applications for the (CALVET) are available in the El Camino College Veterans Office, by calling 213-744-4825, or at www.calvet.ca.gov/.

Writing Center

The Writing Center, located in Humanities 122, serves all El Camino College students who need assistance with writing. The Writing Center offers one-on-one writing conferences with highly qualified tutors, all of whom have a bachelor's or master's degree. In addition, the Writing Center offers tutorials in grammar, documentation, and specialized writing tasks such as college application letters.

To receive services, students must bring their El Camino College identification card, a flash drive to save their work, and a writing assignment from class if they intend to request a writing conference.

All services are drop-in; no appointment is necessary. Writing Center hours are Monday through Thursday, 7:00 a.m. to 8:30 p.m.; and Friday, 7:00 a.m. to 4:30 p.m. The Writing Center telephone number is 310-660- 3873. Please visit the Writing Center's webpage for more information: www.elcamino.edu/academics/humanities/writingcenter.

Student Activities/College Life

Student Activities Center

The Student Activities Center serves as the focal point for El Camino College student life and leadership programs. The Student Activities Center strives to create a supportive and relaxing environment where students can interact with one another outside of the classroom. The Student Activities Center hosts social functions, activities, lectures, Inter-Club Council, student government offices (Associated Students Organization) and the photo identification card booth. The Student Activities Center offers an open dining area, games, a place to study, and a place to socialize or just relax. In the Student Activities Center, students may become involved in clubs and organizations, Associated Students Organization (ASO), and find information about off-campus housing. The Student Development Office is housed in the Student Activities Center.

Hours of operation vary; please call 310-660-3593 ext. 3500 for information, or visit www.elcamino.edu/student-services/activities/sdo.asp.

Associated Students Organization

The Associated Students Organization (ASO) is the officially recognized student group charged with representing the needs and interests of all El Camino College students. Officers are elected/ appointed each year to provide a voice for ECC students. Everyone who is registered at El Camino College is a member of the Associated Students. ASO sponsors programs and services to benefit the entire student body.

Student Senate

Each of the college's academic divisions is represented on the Student Senate by two elected students. The senate is concerned with the total student body and acts as a point of communication between the academic divisions and students. The Student Development Office advises the membership to sponsor such activities as workshops, lectures, and social events. Overall leadership of the senate is provided by the ASO president and the ASO cabinet. The president, vice president, director of finance, director of academic affairs, director of student services, director of public relations, director of human resources, and director of external affairs are elected by the student body each spring.

Student Trustee

A student trustee is elected each spring to represent the students for one year on the Board of Trustees of the El Camino Community College District. The representative participates fully with the Board except in matters of personnel or pending litigation.

Inter-Club Council

The Inter-Club Council is comprised of representatives from campus clubs and sponsors activities such as homecoming and blood drives. There are a variety of clubs available for students to join, including honorary, service, cultural, performing arts, and special interest organizations. Information on forming a club or joining one is available in the Student Development Office.

Students' Rights and Responsibilities

Student Rights and Grievances

Administrative Procedure 5530

For the purpose of this procedure, a student grievance is defined as a claim by a student that his/her student status, rights, or privileges have been adversely affected by a college decision or action. This procedure is available for students who desire to pursue grievance procedures against an employee of the District. The student shall be entitled to representation, by a person of his/her choice, other than legal counsel, at all informal complaint meetings. District employees will be notified of student grievances received by the Grievance Officer or designee and are entitled to representation at all informal complaint meetings.

Note: The District is committed to resolving student grievances in a fair and equitable manner. Students should work through the District's process first before escalating issues to other agencies. Issues that are not resolved at the District level may be presented to the California Community Colleges Chancellor's Office, the U.S. Department of Education, or other federal, state, or local applicable entity.

This procedure is not available for use by any student who believes he/she has been subjected to unlawful discrimination, including sexual and gender-based discrimination as prohibited by Title IX of the Higher Education Amendments of 1972. The basis for alleging unlawful discrimination, including sexual and gender-based discrimination, and the procedures to be used to file such a complaint are set forth in the District's Board.

Policy and Administrative Procedure 3430 - Prohibition of Harassment and Board Policy and Administrative Procedure 3540 - Sexual and Gender-Based Misconduct. The District's Title IX Coordinator will be notified immediately upon the receipt of such grievances by the Grievance Officer or designee.

Students who make false or malicious charges against an employee of the District are subject to disciplinary action as outlined in Board Policy 5500 and Administrative Procedure 5500 - Standards of Student Conduct.

The procedures shall include, but not be limited to, grievances regarding:

1. Admissions
2. Financial aid
3. Access to or receipt of aid from student service entities
4. Noncompliance with board policies and administrative procedures
5. The exercise of rights of free expression protected by state and federal constitutions and Education Code Section 76120.

This procedure does not apply to the following:

1. Student disciplinary actions, which are covered under Board Policy 5500 and Administrative Procedure 5500 Standards of Student Conduct and Administrative Procedures 5520 - Student Discipline Procedures.
2. Complaints about police citations (e.g., "tickets"). Complaints about citations must be directed to the District's Campus Police Department.
3. Course grades to the extent permitted by Education Code Section 76224(a). Grade appeals, which are addressed in Board Policy 4231 and Administrative Procedure 4231 - Grade Change. Students may not grieve solely for receiving substandard grades.

Definitions:

1. Party: The student or respondent(s) together with their representatives. "Party" shall not include the Grievance Hearing Committee or the Grievance Officer.
2. Superintendent/President: The Superintendent/ President or a designated representative of the Superintendent/President.
3. Student: A currently enrolled student, a person who has filed an application for admission to the College, or a former student. A grievance by an applicant shall be limited to a complaint regarding denial of admission. Former students shall be limited to grievances relating to course grades to the extent permitted by Education Code Section 76224(a).
4. Grievant: A student who has filed a grievance.
5. Respondent: Any person claimed by a grievant to be responsible for the alleged wrongdoing.
6. Business Day: Unless otherwise provided, business day shall mean a day during which the College is in session and regular classes are held, excluding Saturdays, Sundays, and public holidays.
7. Grievance Officer: Appointed by the Superintendent/President or designated representative to assist students in seeking resolution.

Informal Resolution

1. The Superintendent/President or designee shall appoint an employee who shall assist students in seeking resolution by informal means. This person shall be called the Grievance Officer. The Grievance Officer and the student may also seek the assistance of the Associated Students Organization President or designee in attempting to resolve a grievance informally.
2. A student who believes that he/she has been treated unfairly by a District employee must make a reasonable, good faith attempt to resolve the problem on an informal basis by first meeting individually with the employee. In the event that the student first contacts the employee's supervisor (including the Dean of the faculty or classified staff member), the supervisor shall first direct the student to meet with the employee. If the issue is not resolved in that meeting (or reasonable attempts to arrange the meeting fail), then the employee's supervisor shall meet with both parties, in an earnest and good faith attempt to resolve the matter successfully. If, after this, the matter cannot be resolved informally, the student may file a formal grievance.
3. At no time shall any of the persons directly or indirectly involved in the case use the fact of such informal discussion, the fact that a grievance has been filed, or the character of the informal discussion for the purpose of strengthening the case for or against persons directly involved in the dispute or for any purpose other than the settlement of the grievance.

4. Any student who believes he/she has a grievance shall file a Statement of Grievance with the Grievance Officer within ten (10) business days of the incident on which the grievance is based, or ten (10) business days after the student learns of the basis for the grievance, whichever is later. The Statement of Grievance must be filed whether or not the student has already initiated efforts at informal resolution, if the student wishes the grievance to become official. Within ten (10) business days following receipt of the Statement of Grievance Form, the Grievance Officer shall advise the student of his or her rights and responsibilities under these procedures, and assist the student, if necessary, in the final preparation of the Statement of Grievance form. All parties to the grievance shall be given notice not less than seven (7) business days from the filing of the grievance form.
5. If, at the end of ten (10) business days following the student's first meeting with the Grievance Officer there is no informal resolution of the complaint which is satisfactory to the student, the student shall have the right to request a grievance hearing. The respondent(s) will be informed at this stage within two (2) business days.
6. This concludes the Informal Resolution Process.

Grievance Hearing Committee

The Superintendent/President or designee shall at the beginning of each semester, including any intersession, establish a standing panel of members of the College community, including students, classified staff, faculty members and administrators, from which one or more Grievance Hearing Committees may be appointed. The panel will be established with the advice and assistance of the Associated Students Organization, Classified Employees and the Academic Senate, who shall each submit names to the Superintendent/President or designee for inclusion on the panel. A Grievance Hearing Committee shall be constituted in accordance with the following:

1. It shall include one student, one faculty member, one member of the classified service and one College administrator selected from the panel described above.
2. No person shall serve as a member of a Grievance Hearing Committee if that person has been personally involved in any matter giving rise to the grievance, has made any statement on the matters at issue, or could otherwise not act in a neutral manner. Any party to the grievance may challenge for cause any member of the hearing committee prior to the beginning of the hearing by addressing a challenge to the Superintendent/President or designee who shall determine whether cause for disqualification has been shown. If the Superintendent/President or designee feels that sufficient ground for removal of a member of the committee has been presented, the Superintendent/President or designee shall remove the challenged member or members and substitute a member or members from the panel described above. This determination is subject to appeal as defined below.
3. The Grievance Officer shall sit with the Grievance Hearing Committee but shall not serve as a member nor vote. The Grievance Officer shall coordinate all scheduling of hearings, shall serve to assist all parties and the Grievance Hearing Committee to facilitate a full, fair and efficient resolution of the grievance, and shall avoid an adversary role.

Request for Student Grievance Hearing

1. Any request for a grievance hearing shall be filed with the Grievance Officer on a Request for a Student Grievance Hearing Form within ten (10) business days after filing the Statement of Grievance as described above.
2. Within fifteen (15) business days following receipt of the request for a grievance hearing, the Superintendent/President or designee shall appoint a Grievance Hearing Committee as described above. The Grievance Hearing Committee shall meet in private, without the parties present, to select a chair to determine the basis of the Statement of Grievance.
3. If the hearing is warranted, the determination of whether the Statement of Grievance presents sufficient grounds for a hearing shall be made by the Grievance Officer based on the following:
 1. The statement contains facts which, if true, would constitute a grievance under these procedures;
 2. The grievant is a student as defined in these procedures, which include applicants and former students;
 3. The grievant is personally and directly affected by the alleged grievance;
 4. The grievance was filed in a timely manner; and
 5. The grievance is not clearly frivolous, clearly without foundation, or clearly filed for purposes of harassment.
4. If the grievance does not meet each of the requirements, the Grievance Officer shall notify the student in writing of the rejection of the Request for a Grievance Hearing, together with the specific reasons(s) for the rejection and the procedures for appeal. This notice will be provided within ten (10) business days of the date the decision is made by the Grievance Officer.
5. Any appeal relating to a Grievance Officer decision that the Statement of Grievance does not present a grievance as defined in these procedures shall be made in writing to the Superintendent/ President or designee within five (5) business days of that decision. The Superintendent/President or designee shall review the Statement of Grievance and Request for a Student Grievance Hearing in accordance with the requirements for a grievance provided in these procedures, but shall not consider any other matters.
6. If the Request for a Grievance Hearing satisfies each of the requirements, the Grievance Officer shall schedule a grievance hearing. The hearing will begin within fifteen (15) business days following the decision to grant a Grievance

Hearing. All parties to the grievance shall be given not less than seven (7) business days' notice of the date, time and place of the hearing, a copy of the grievance, any supporting documentation, and the opportunity to provide a written response.

Hearing Procedure

1. The decision of the Grievance Hearing Committee chair shall be final on all matters relating to the conduct of the hearing unless there is a vote of a majority of the other members of the panel to the contrary.
2. The members of the Grievance Hearing Committee shall be provided with a copy of the grievance and any written response provided by the respondent before the hearing begins.
3. Each party to the grievance may call witnesses and introduce oral and written testimony relevant to the issues of the matter. Formal rules of evidence shall not apply. Any relevant evidence shall be admitted.
4. District employees will be notified of grievance hearings in advance by the Grievance Officer or designee at least seven (7) business days in advance and are entitled to representation at grievance hearings. District employees will be provided with a copy of all documentation collected related to a grievance at least two (2) business days prior to grievance hearings. Student grievants will also have the right to request all documentation collected related to a grievance at least two (2) business days prior to grievance hearings.
5. Unless the Grievance Hearing Committee determines to proceed otherwise, each party to the grievance shall be permitted to make an opening statement. Thereafter, the grievant or grievants shall make the first presentation, followed by the respondent or respondents. The grievant(s) and respondent(s) may present rebuttal evidence after the respondent(s)' evidence is presented. The burden shall be on the grievant or grievants to prove by substantial evidence that the facts alleged are true and that a grievance has been established as specified above.
6. Each party to the grievance may represent himself/herself, and may also have the right to be represented by a person of his/her choice; except that a party shall not be represented by an attorney unless, in the judgment of the Grievance Chair, complex legal issues are involved. If a party wishes to be represented by an attorney, a request must be presented no less than five (5) business days prior to the date of the hearing. If one party is permitted to be represented by an attorney, the other party shall have the right to be represented by an attorney. The hearing committee may also request legal assistance through the Superintendent/President or designee. Any legal advisor provided to the hearing committee may sit with it in an advisory capacity to provide legal counsel but shall not be a member of the panel nor vote with it.
7. Hearings shall be closed and confidential unless all parties request that it be open to the public. Any such request must be made no less than five (5) business days prior to the date of the hearing.
8. In a closed hearing, witnesses shall not be present at the hearing when not testifying, unless all parties and the committee agree to the contrary.
9. The hearing shall be recorded by the Grievance Officer by audio tape recording and shall be the only recording made. No witness who refuses to be recorded may be permitted to give testimony. The Grievance Hearing Committee Chair shall, at the beginning of the hearing, ask each person present to identify themselves by name, and thereafter shall ask witnesses to identify themselves by name. The audio recording shall remain in the custody of the District at all times, unless released to a professional transcribing service. Any party may request a copy of the audio recording.
10. All testimony shall be taken under oath. The Grievance Hearing Committee Chair shall administer the oath. Written statements of witnesses under penalty of perjury shall not be used unless the witness is unavailable to testify. A witness who refuses to be audio recorded shall be considered to be unavailable.
11. Within five (5) business days following the close of the hearing, the Grievance Hearing Committee shall prepare and send to the Superintendent/ President or designee a written decision. The decision shall include specific factual findings regarding the grievance, and shall include specific conclusions regarding whether a grievance has been established as defined above. The decision shall also include a specific recommendation regarding the relief to be afforded the grievant, if any. The decision shall be based only on the record of the hearing, and not on matters outside of that record. The record consists of the original grievance, any written response, and the oral and written evidence produced at the hearing.

Dean of Student Support Services or Designee Decision

Within five (5) business days following receipt of the Grievance Hearing Committee's decision and recommendation(s), the Dean of Student Support Services or designee shall send to all parties his/her written decision, together with the Grievance Hearing Committee's decision and recommendations. The Dean of Student Support Services or designee may accept or reject the findings, decisions and recommendations. The Dean of Student Support Services or designee may accept or reject the findings, decisions and recommendations of the Grievance Hearing Committee. The factual findings of the Grievance Hearing Committee shall be accorded great weight; and if the Dean of Student Support Services or designee does not accept the decision or a finding or recommendation of the Grievance Hearing Committee, the Dean of Student Support Services or designee shall review the record of the hearing, and shall prepare a new written decision which contains specific, factual findings and conclusions. The decision of the Dean of Student Support Services or designee shall be final, subject only to appeal as provided below.

Appeal

Any party to the grievance may appeal the decision of the Grievance Hearing Committee by writing to the Vice President of Student Services within seven (7) business days of the date on the written notification by the Grievance Hearing Committee.

1. The Vice President of Student Services shall examine all documents received and shall grant review of the matter only if he or she determines from these documents that the decision of Grievance Hearing Committee was in error.
2. If the Vice President of Student Services determines that review is not appropriate, he or she shall, within ten (10) business days after receipt of the request for review, send written notice denying review and affirming the decision of the Grievance Hearing Committee.
3. If the Vice President of Student Services determines that review is appropriate, he or she shall, within ten (10) business days after receipt of the request schedule a meeting with the grievant or respondent and the Grievance Hearing Committee chair, giving the grievant or respondent at least five (5) business days written notice. The grievant or respondent will be allowed to present his or her objections to the Dean of Student Support Services' decision, and the Grievance Hearing Committee chair will be allowed to respond thereto.
4. After such meeting, the Vice President of Student Services may reverse, revise or modify the decision or the Vice President may let the decision stand.
5. The Vice President's decision shall be in writing and shall include a statement of reasons for the decision. The Vice President's decision shall be final. The decision will be sent in writing to the grievant and respondent no more than five (5) business days following the appeal.

Time Limits

Any times specified in this administrative procedure may be shortened or lengthened if there is mutual concurrence by all parties.

Student Complaint Procedure for Issues Not Resolved at the Campus Level

Most complaints, grievances, or disciplinary matters should be resolved at the campus level. This is the quickest and most successful way of resolving issues involving a California Community College (CCC). Students are encouraged to work through the campus complaint process first, before escalating issues to any of the following resources. Issues that are not resolved at the campus level may be presented:

1. To the Accrediting Commission for Community and Junior Colleges (ACCJC) at www.accjc.org/complaint-process if the complaint is associated with the institution's compliance with academic program quality and accrediting standards. The ACCJC can also be contacted by mail (The Accrediting Commission for Community and Junior Colleges Western Association of Schools and Colleges, 10 Commercial Boulevard, Suite 204, Novato, CA 94949), or by phone (415-506-0234), fax (415-506-0238), or email (accjc@accjc.org). ACCJC is the agency that accredits the academic programs of the California Community Colleges.
2. To the CCC Chancellor's Office Complaints Form at <http://californiacommunitycolleges.cccco.edu/ComplaintsForm.aspx> if your complaint does not concern El Camino College's compliance with academic program quality and accrediting standards.
3. To the CCC Chancellor's Office Legal Affairs website at <http://extranet.cccco.edu/Divisions/Legal/Discrimination.aspx> if your complaint involves unlawful discrimination.
4. To the Board of Registered Nurses (BRN) at www.rn.ca.gov/enforcement/complaint.shtml if the complaint involves the Nursing program and alleges that a licensee of the Board has engaged in illegal activities which are related to his/her professional responsibilities. The BRN can also be contacted by mail (Board of Registered Nursing, Attn: Complaint Intake, PO Box 944210, Sacramento, CA 94244-2100), or by phone, (916-322-3350), fax (916-574-7693), or email (Enforcement.BRN@dca.ca.gov).
5. To the Joint Review Committee on Education in Radiologic Technology (JRCERT) at www.jrcert.org/ if the complaint involves the Radiologic Technology program and alleges non-compliance with JRCERT accreditation standards. JRCERT can also be contacted by mail (Chief Executive Officer, Joint Review Committee on Education in Radiologic Technology, 20 North Wacker Drive, Suite 2850, Chicago, IL 60606-3182), or by phone (312-704-5300), fax (312-704-5304), or email (mail@jrcert.org).
6. To the Commission on Accreditation for Respiratory Care (COARC) at www.coarc.com/ if the complaint involves the Respiratory Care program and alleges non-compliance with COARC accreditation standards. COARC can also be contacted by mail (Commission on Accreditation for Respiratory Care, 1248 Harwood Road, Bedford, TX 76021-4244), or by phone (817-283-2835), fax (817-354-8519), or email (tom@coarc.com).
7. To the Office of the State Fire Marshal at <http://osfm.fire.ca.gov/> if the complaint involves the Fire and Emergency Technology program and alleges non-compliance with accredited academies standards. The Office of the State Fire Marshal can be contacted by mail (Office of the State Fire Marshal, P.O. Box 944246, Sacramento, CA 94244-2460), or by phone (916-445-8200). Information regarding the Office of the State Fire Marshal Accredited Academies Coordinator can be accessed at <http://osfm.fire.ca.gov/training/accreditedacademies>.

Policies and Procedures

Standards of Student Conduct

Board Policy 5500

The Superintendent/President shall establish procedures for disciplining students in accordance with the requirements for due process of the federal and state laws and regulations.

The procedures shall clearly define the conduct that is subject to discipline, and shall identify potential disciplinary actions including, but not limited to, the removal, suspension, or expulsion of a student.

The Board shall consider any recommendation from the Superintendent/President for expulsion. The Board shall consider an expulsion recommendation in closed session unless the student requests that the matter be considered in a public meeting. Final action by the Board on the expulsion shall be taken at a public meeting.

El Camino College is dedicated to maintaining an optimal learning environment and insists upon academic honesty and adherence to standards of student conduct.

To uphold the academic integrity, all members of the academic community shall assume responsibility for providing an educational environment of the highest standard characterized by academic honesty. It is the responsibility of all members of the academic community to encourage learning, promote honesty, and act with fairness.

Student conduct at El Camino College must conform to federal and state laws and District policies and procedures. El Camino College personnel are dedicated to maintaining a positive learning environment. Optimal standards of student conduct are essential to the maintenance of a quality college environment.

El Camino College will develop and maintain Standards of Student Conduct. The procedures shall be made widely available to students through the College catalog, and other means including electronic communications.

Administrative Procedure 5500

Student conduct at El Camino College must conform to federal and state laws and District policies and procedures. Standards will apply to all students on District-owned facilities or controlled property or at District-sponsored or supervised functions or electronic media. Violation of such laws, policies, and procedures or behavior adversely affecting suitability as a student, will lead to student disciplinary action. Student disciplinary actions as noted in Board Policy 5500, Administrative Procedure 5500, and Administrative Procedure 5520 may be taken against any person who engages in behavior defined as misconduct.

Students alleged to have violated the Sexual Misconduct Policy with regards to sexual assault, sexual harassment, rape, domestic violence, dating violence, stalking, and retaliation, will be referred to the Title IX Officer. The Title IX Officer will work in coordination with the Director of Student Development or designee to address any violations to the Standards of Student Conduct that are in addition to the allegations of sexual misconduct.

Students who engage in any of the following conduct are subject to the procedures outlined in Administrative Procedure 5520.

Definitions

The following misconduct shall constitute good cause for discipline including, but not limited to, the removal, suspension, or expulsion of a student.

1. DISHONESTY

1. Cheating, plagiarism (including plagiarism in a student publication), or engaging in other academic dishonesty as defined in the College catalog.
2. Representing the words, ideas, or work of another as one's own in any academic exercise including the use of commercial term paper companies or online sources for essays, term papers, or research papers, whether free or paid.
3. Copying from another student or former student or allowing another student to copy from one's work.
4. Allowing another individual to assume one's identity or assuming the identity of another individual.
5. Unauthorized collaboration-intentionally sharing or working together on an academic exercise when such actions are not approved by the course instructor.
6. Changing answers on a previously scored test, assignment, or experiment with the intent to defraud.

1. Inventing data for the purpose of completing an assignment, a laboratory experiment, or case study analysis with the intent to defraud.
 2. Obtaining or copying exams, test questions, or other course materials when prohibited by the instructor.
 3. Giving or receiving information during an examination or test by any means such as sign language, hand signals or secret codes, or through the use of any electronic device.
 4. Using aids such as notes, calculators, or electronic devices unless specifically authorized by the instructor or District personnel.
 5. Handing in the same paper or other assignment in more than one class when prohibited by the instructor.
 6. Any other action which is not an honest reflection of a student's own academic work.
 7. Dishonesty, forgery, alteration, or misuse of District documents, records or identification, or knowingly furnishing false information to the District.
 8. Unauthorized preparation, giving, selling, transfer, distribution, or publication, for any commercial purpose, of any contemporaneous recording of an academic presentation in a classroom or equivalent site of instruction including, but not limited to, handwritten or typed class notes, still photos, audio, or video recording, except as permitted by any District policy or administrative procedure.
2. **DISRUPTIVE BEHAVIOR, INAPPROPRIATE CONDUCT, AND EXPRESSION**
1. Disruptive behavior, willful disobedience, profanity or vulgarity, or the open defiance of the authority of, or abuse of, District personnel or another person.
 2. Causing, attempting to cause, threatening, or acts of aggression including verbal or physical actions that are intended to create fear, apprehension, or bodily harm to another person.
 3. Lewd, indecent, or obscene conduct or expression on District-owned facilities or controlled property or at District-sponsored or supervised functions, including public urination or defecation, public sexual acts, taking intimate pictures of another person without consent, disrobing in public, possession and distribution of any obscene material, or viewing pornographic material.
 4. Engaging in expression which is obscene, libelous or slanderous, or which so incites others as to create a clear and present danger of the commission of unlawful acts on District-owned facilities or controlled property or at District-sponsored or supervised functions, or the violation of lawful District regulations, or the substantial disruption of the orderly operation of the District.
 5. Obstruction or disruption of teaching, research, administration, disciplinary proceedings, or other authorized college activities including, but not limited to, its community service functions or to authorized activities held off-campus.
 6. Obstruction or disruption includes, but is not limited to, the use of skateboards, bicycles, radios, and roller skates.
 7. Failure to comply with the directions of a member of the District certificated personnel, college management or supervisory personnel, college staff member, or campus police acting within the scope of his or her duties.
 8. Conducting, organizing or participating in any activity involving gambling except as permitted by federal and state law.
3. **DRUGS, ALCOHOL, AND SMOKING**
1. Unlawful possession, use, sale, offer to sell, or furnishing, or being under the influence of, any controlled substance listed in California Health and Safety Code Sections 11053 et seq., an alcoholic beverage, or an intoxicant of any kind; or unlawful possession of, or offering, arranging or negotiating the sale of any drug paraphernalia, as defined in California Health and Safety Code Section 11014.5 on District-owned facilities or controlled property or at District-sponsored or supervised functions.
 2. Willful or persistent smoking (including tobacco and vapor cigarettes) in any area where smoking has been prohibited by law or by regulation of the District.
4. **THEFT, ROBBERY, AND DAMAGE**
1. Committing or attempting to commit robbery or extortion.
 2. Causing or attempting to cause damage to District property or to private property on District-owned facilities or controlled property or at District-sponsored or supervised functions.
 3. Stealing or attempting to steal District property or private property or knowingly receiving stolen District property or private property on District-owned facilities or controlled property or at District-sponsored or supervised functions.
 4. Willful misconduct which results in cutting, defacing, or other injury to any real or personal property owned by the District or personal property of other individuals District-owned facilities or controlled property or at District-sponsored or supervised functions.

5. SEXUAL MISCONDUCT
 1. Committing sexual misconduct including, but not limited to, sexual harassment, domestic violence, dating violence, stalking, sexual assault (nonconsensual sexual contact and/or intercourse), sexual exploitation, intimidation, retaliation, and rape as defined by law or by District policies and procedures.
 2. Lewd, indecent, or obscene conduct on District-owned or controlled property or at District-sponsored or supervised functions.
 3. Other misconduct offenses in violation of the El Camino College Sexual Misconduct Policy.
6. HARASSMENT, THREATENING, AND VIOLENT BEHAVIOR
 1. Causing, attempting to cause, or threatening to cause physical injury to another person on District-owned facilities or controlled property or at District-sponsored or supervised functions.
 2. Engaging in intimidating conduct or bullying against another person through words or actions, including direct physical contact, verbal assaults, such as teasing or name-calling, social isolation or manipulation, and cyber bullying.
 3. Willful misconduct which results in injury or death to a student or to college personnel or which results in cutting, defacing, or other injury to any real or personal property on District-owned facilities or controlled property or at District-sponsored or supervised functions.
 4. Disruptive behavior, willful disobedience, habitual profanity or vulgarity, or the open and persistent defiance of the authority of, or persistent abuse of, District personnel or another person.
 5. Willful misconduct which results in injury or death to another person or which results in cutting, de-facing, or other injury to any real or personal property owned by the District or controlled property or at District-sponsored or supervised functions.
 6. Other misconduct offenses relative to disability, gender, gender identity, gender expression, nationality, race or ethnicity, religion, sexual orientation, or any other status protected by law including, but not limited to, bullying, discrimination, threatening, or causing abuse (including physical and/or verbal).
 7. Violence between those in intimate/dating relationships to each other, and stalking, as defined by law or by District policies and procedures.
7. WEAPONS

Possession, sale or otherwise furnishing any firearm, knife, explosive, or other dangerous object including, but not limited to, any facsimile firearm, knife, or explosive on District-owned facilities or controlled property or at District-sponsored or supervised functions, unless, in the case of possession of any object of this type, the student has obtained written permission to possess the item from a District employee, which is concurred in by the Superintendent/President or designee.
8. MISUSE OF FACILITIES

Unauthorized entry upon or use of District-owned facilities or controlled property or at District-sponsored or supervised functions.
9. MISCELLANEOUS
 1. Introduction of animals on District-owned facilities or controlled property or at District-sponsored or supervised functions are not permitted with the exception of service animals that provide assistance as permitted by federal and state law.
 2. Persistent, serious misconduct where other means of correction have failed to bring about proper conduct.
 3. The commission of any act constituting a crime under federal or state law on District-owned facilities or controlled property or at District-sponsored or supervised functions.

Student Discipline Procedures

Administrative Procedure 5520

The purpose of this procedure is to provide a prompt and equitable means to address violations of the Standards of Student Conduct, which guarantees to the student or students involved the due process rights guaranteed them by state and federal constitutional protections. This procedure will be used in a fair and equitable manner, and not for purposes of retaliation. It is not intended to substitute for criminal or civil proceedings that may be initiated by other agencies.

The Administrative Procedure is specifically not intended to infringe in any way on the rights of students to engage in free expression as protected by the state and federal constitutions, and by Education Code Section 76120, and will not be used to punish expression that is protected.

Definitions

1. College District: El Camino Community College District. Student discipline sanctions imposed to students at El Camino College will also apply to all instructional sites in the El Camino Community College District.
2. Student: Any person who has applied for admission or currently enrolled as a student in any program offered by the College District.
3. Instructor: Any academic employee of the College District in whose class a student subject to sanction is enrolled, or counselor who is providing or has provided services to the student, or other academic employee who has responsibility for the student's educational program.
4. Complainant: A person who submits a charge alleging that a student has violated the College District's Student Code of Conduct.
5. Accused Student: A student who has been accused of violating the Student Code of Conduct by a College District employee, student, or visitor.
6. Advisor: An advisor is anyone other than the complainant or accused student. An advisor may include, but is not limited to, another student, family member, attorney, College personnel, or community member. The advisor's role is to observe, provide counsel, or support the complainant or accused student.
7. Business Day: Unless otherwise provided, a business day shall mean a day during which the College District is in session and regular classes are held, excluding Saturdays, Sundays, and public holidays.
8. College District Property: Property under the control of the El Camino Community College District or any place that is the site of a College District approved activity or function.

Jurisdiction of the College

Sanctions for violations of the Student Conduct Code may be imposed for conduct which occurs on the College premises, in or out of the classroom setting, while using College technology, at off-campus instructional sites, during off-campus College-sponsored events and for off-campus conduct which materially and substantially interferes with the College's operational and educational programs.

Filing a Complaint

Any person may allege a violation of the Student Conduct Code by completing a Student Conduct Incident Report Form and submitting it to the Student Development Office. The College reserves the right to initiate a student conduct process based on available information, even if a formal complaint has not been received. The complaint shall describe the conduct in question and, if known, the name of the person or persons alleged to have engaged in that conduct. The filing of a complaint assumes that the complainant desires to initiate the inquiry that may result in official disciplinary action against the alleged violator. The complainant should file a complaint within a reasonable amount of time not to exceed thirty (30) business days from the date of the incident.

Overview of Discipline Process

1. Each student is responsible for reading and complying with the Standards of Student Conduct which is made available on the El Camino College website on the Student Development Office page or from the Student Development Office located in the Activities Center, Room 160 and the College Catalog.
2. Any member of the College community can initiate an accusation of an alleged violation.
3. If a student is accused of an alleged violation, he or she will receive written notice of the conduct warranting discipline via El Camino College issued e-mail account with delivery notification. The notice may include a request for a review meeting and will include:
 1. The specific code violations
 2. A short statement of the facts supporting the accusation
 3. The right of the student to meet with the Director of Student Development or designee
 4. Reference to the Standards of Student Conduct outlining the process and rights of students
 5. The nature of the sanctions being considered
4. Time Limits: The notice must be provided to the student within forty (40) business days of the date on which the conduct took place; in the case of continuous, repeated or ongoing conduct, the notice must be provided within ten (10) business days of the date on which conduct occurred which led to the decision to take disciplinary action.
5. Meeting: If the student chooses to meet with the Director of Student Development or designee, the meeting must occur no sooner than five (5) business days after the notice is provided. At the meeting, the student must again be told the facts leading to the accusation, and must be given an opportunity to respond verbally or in writing to the accusation.
 1. Both the complainant and the accused student may be accompanied by an advisor to any meetings, interviews, or hearings. The advisor's role is to observe, provide counsel, or support the complainant or accused student. An advisor may not speak on behalf of the complainant or accused student or speak to the Director of Student

Development or designee. Advisors who do not comply with their role may be removed from the meeting, interview, or hearing.

6. Upon completion of the review meeting, the student shall have the right to the following:
 1. Be provided a written list of findings by the Director of Student Development or designee
 2. Accept or deny responsibility
 3. Have sanctions imposed, if found in violation of the Standards of Student Conduct
 4. Request a hearing of the Disciplinary Hearing Panel should the student disagree with the finding(s) and sanction(s) of the Director of Student Development or designee
 5. Be informed of the appropriate policy and procedure
 6. Be informed of his/her right to request a copy of their student conduct file
7. Students should be aware that the student conduct process is different from criminal and civil court proceedings. Procedures and rights in student conduct proceedings are conducted with fairness to all, but do not include the same protections of due process afforded by the courts. The standard used to determine whether a violation of the Standards of Student Conduct has occurred will be a preponderance of evidence (more likely than not). Due process within these procedures, assures timely written notice, a hearing before an objective decision-maker or panel (should one be requested) and a process for appeal.
8. Students continue to be subject to city, state, and federal laws while at El Camino College and allegations, charges, or violations of those laws may also constitute violations of the Standards of Student Conduct. In such instances, El Camino College may proceed with disciplinary action under the Standards of Student Conduct independently of any criminal proceeding involving the same conduct and may impose sanctions for violation of the Standards of Student Conduct even if such criminal proceeding is not yet resolved or is resolved in the student's favor.
9. No student will be found in violation of El Camino College Standards of Student Conduct without information showing by preponderance of the evidence that a policy violation has occurred. At El Camino College's sole discretion, sanctions will be proportionate to the severity of the violation(s).
10. If a student is found responsible for one or more violations of the Standards of Student Conduct, the student's prior conduct record will be taken into consideration and may result in progressive sanctions because of a pattern of behavior.

Determination of Sanctions

The following factors may be considered in determining what sanctions are appropriate in a particular case. While sanctions are applied equitably and fairly, it is done so with consideration for the uniqueness of each individual case.

1. The nature and/or severity of the violation(s)
2. Prior violations and disciplinary history
3. Mitigating circumstances surrounding the violation
4. The student's motive or purpose for engaging in the behavior
5. Sanctions which have been imposed in similar cases in the past
6. The developmental and educational impact on the student

Possible Sanctions

Multiple sanctions may be imposed including, but not limited to:

1. Sanctions for Academic Dishonesty
Students found to be responsible for academic dishonesty may incur any of the below sanctions:
 1. The instructor may assign a failing grade to the examination or assignment in which the alleged cheating or plagiarism occurred.
 2. The instructor may dismiss the student from the class or activity for the present and/or following class session(s).
 3. The instructor or the Division administrator may require a meeting with the instructor and/or the Administrator; and/or
 4. The instructor shall complete a Student Conduct Incident Report and forward a copy to the Division administrator and the Director of Student Development or designee.

Other Sanctions

1. Written or Verbal Reprimand: An admonition to the student to cease and desist from conduct determined to violate the Standards of Student Conduct. Written reprimands may become part of a student's permanent record at the College District. A record of the fact that a verbal reprimand has been given may become part of a student's record at the College District.
2. Educational Sanctions: An educational sanction may include additional work assignments, essays, community service, behavioral contract, administrative referral, or other related educational assignment.

3. Probation: A reprimand for violation of specified regulations. Probation is for a designated period of time and includes the probability of more severe disciplinary sanctions if the student is found to be in violation of any Standards of Student Code during the probationary period. It may include restriction from contact with specified individuals, College activities, services, offices, or designated areas. Probation shall not be imposed for a period longer than one (1) academic year.
4. Restitution: A payment to compensate an injured party for financial harm in cases involving misconduct including, but not limited to, theft, destruction of property, or deception.
5. Removal from Class/Facility/College District Entity: Any instructor or Division administrator or designee may remove a student from the class, activity, office, department, or other educational forum for the day of the incident and one additional instructional day. The instructor or Division administrator or designee shall immediately report the removal to the Director of Student Development or designee and his or her Division Dean or Associate Dean. The student shall not be returned to the class during the period of the removal without the concurrence of the instructor.
6. Withdrawal of Consent to Remain On-Campus: The College District's Campus Police Department, may notify any person for whom there is a reasonable belief that the person has willfully disrupted the orderly operation of the campus, that consent to remain on-campus has been withdrawn. If the person is on-campus at the time, he or she must promptly leave or be escorted off-campus. If consent is withdrawn a written report must be promptly made to the Superintendent/President or designee.
7. The person from whom consent has been withdrawn may submit a written request for a hearing on the withdrawal within the period of the withdrawal. The request shall be granted not later than ten (10) business days from the date of the receipt of the request. The hearing will be conducted in accordance with the provisions of this administrative procedure relating to interim suspensions.
8. Any person as to whom consent to remain on-campus has been withdrawn who knowingly reenters the campus during the period in which consent has been withdrawn, except to come for a meeting or hearing, is subject to arrest. (Penal Code Section 626.4)
9. No Contact Order: An issuance that there should be no personal or interpersonal contact or communication between involved parties. This includes verbal and non-verbal communication.
10. Short-Term Suspension: Exclusion of the student by the Director of Student Development or designee for good cause from one or more classes and/or from all activities of the College District for a period of up to ten (10) consecutive days of instruction.
11. Within five (5) business days after the student meets with the Director of Student Development or designee, the Director of Student Development or designee shall decide whether to impose a short-term suspension, whether to impose some lesser sanction, or whether to end the matter. Written notice of the Director or designee's decision shall be provided to the student. The notice will include the length of time of the suspension or the nature of the lesser sanction. The Director of Student Development or designee's decision on a short-term suspension shall be final.
12. Long-Term Suspension: Exclusion of the student by the Director of Student Development or designee for good cause from one or more classes for the remainder of the school term and/ or from all classes and activities of the College District for the remainder of the current term with a maximum of two (2) academic years.
13. Within five (5) business days after the student meets with the Superintendent/ President or designee, the Director of Student Development or designee shall, pursuant to a recommendation from the Director of Student Development or designee, decide whether to impose a long-term suspension. Written notice of the Superintendent/President or designee's decision shall be provided to the student. The notice will include the right of the student to request a formal hearing before a long-term suspension is imposed, and a copy of this policy describing the procedures for a hearing.
14. Students who receive long-term suspensions are permitted on-campus to conduct student business, but must receive permission from the Director of Student Development or designee prior to coming to campus and must check-in with the College District's Campus Police Department to obtain a police escort while on-campus.

Immediate Interim Suspension (Education Code Section 66017)

The Director of Student Development or designee may order immediate interim suspension of a student where he or she concludes the following:

1. To ensure the safety and well-being of members of the College District community or preservation of College District property
2. To ensure the student's own physical or emotional safety and well-being
3. That the student poses an immediate threat or disruption of or interference with the normal operations of the College District; and/or
4. That the student has been accused of a severe violation and cannot be located and/or does not participate in the conduct process

In cases where an interim suspension has been ordered, the time limits contained in this administrative procedure shall not apply, and all hearing rights, including the right to a formal hearing where a long-term suspension or expulsion is recommended, will be afforded to the student within ten (10) business days of the decision to impose an interim suspension.

Expulsion

Expulsion is the permanent separation of a student from El Camino College and Compton College by action of the Board of Trustees for good cause when other means of correction fail to bring about appropriate conduct, or when the presence of the student causes a continuing danger to the safety of others. The student is prohibited from College District property, functions, events, and activities. Permanent notification will appear on student's El Camino College official transcript.

Within ten (10) business days after the student meets with the Director of Student Development or designee, the Director of Student Development or designee shall decide whether to recommend expulsion to the Board of Trustees. Written notice of the Director or designee's decision shall be provided to the student. The notice will include the right of the student to request a formal hearing before expulsion is imposed, and a copy of this policy describing the procedures for a disciplinary hearing.

Disciplinary Hearing Procedures

1. Request for Disciplinary Hearing
Within five (5) business days after the receipt of the Director of Student Development or designee's decision regarding a long-term suspension or expulsion, the student may request a formal hearing. The request must be made in writing to the Director of Student Development or designee.
2. Schedule of Disciplinary Hearing
 1. The formal hearing shall be held no sooner than ten (10) to twenty (20) business days after a formal request for hearing is received by the Student Development Office.
 2. The Dean of Student Support Services or designee will inform the student of the hearing date and time by certified mail, return receipt requested, e-mail to his or her El Camino College issued e-mail account, with delivery notification and/or in person with signature verification of receipt at least five (5) business days prior to the hearing date. The notice will enclose a description of the procedures to be followed at the hearing.
 3. The student and the College have the right to receive copies of all documents that are to be presented to the Disciplinary Hearing Panel.
 4. The Disciplinary Hearing Chair shall provide the student copies of all documents to be presented to the panel. The Chair shall make such documents available to the student as soon as practical before the hearing but not less than two (2) business days before the hearing.
 5. If the student intends to present any documents to the Disciplinary Hearing Panel he or she shall provide copies of the same to the Disciplinary Hearing Chair no less than two (2) business days prior to the hearing.
 6. If a student who has been given notice does not appear for the hearing, the information in support of the alleged violation(s) will be presented and considered in the student's absence. A student will be considered absent fifteen (15) minutes after the time the hearing was scheduled to convene.
3. Disciplinary Hearing Panel
 1. The Hearing Panel shall consist of the Dean of Student Support Services or designee as the Disciplinary Hearing Chair and one representative from each of the following groups: (1) Academic Senate; (2) Classified Employees; (3) Associated Student Organization; and (4) College Management which may include College supervisors.
 2. An affirmative vote of three members of the Disciplinary Hearing Panel shall be required to determine responsibility and sanctions.
 3. The Superintendent/President or designee, the president of the Academic Senate or designee, the president of the Classified Employees bargaining unit or designee, and the president of the Associated Student Organization (ASO) or designee shall each, at the beginning of the academic year, establish a list of at least five (5) persons who will serve on the Student Disciplinary Hearing panels. The Superintendent/President or designee shall appoint the hearing panel from the names on these lists. However, no administrator, faculty member, classified staff member, or student who has any personal involvement in the matter to be decided, who is a necessary witness, or who could not otherwise act in a neutral manner shall serve on a Disciplinary Hearing Panel.
4. Disciplinary Hearing Panel Chair
The decision of the Chair of the Disciplinary Hearing Panel shall be final on all matters relating to the conduct of the hearing unless there is a vote by other members of the panel to the contrary.

Conduct of the Disciplinary Hearing

All hearings shall be held in closed session and are confidential they are not open to the public.

1. The members of the disciplinary hearing panel shall be provided with a copy of the complaint(s) against the student and any written response provided by the student before the hearing begins.
2. The facts supporting the accusation shall be presented by a College representative who shall be the Director of Student Development or designee.

3. The College representative and the student may call witnesses and introduce oral and written testimony relevant to the issues of the matter.
4. Formal rules of evidence shall not apply. The standard of proof for Student Disciplinary Hearings will be a preponderance of evidence.
5. Unless the disciplinary hearing panel determines to proceed otherwise, the College representative and the student shall each be permitted to make an opening statement. Thereafter, the College representative shall make the first presentation, followed by the student. The College representative may present rebuttal evidence after the student completes his or her evidence. The burden shall be on the College representative to prove by preponderance of evidence that the facts alleged are true.
6. The student has the right to be assisted in the hearing by an advisor. The advisor may provide counsel or support to the student, but are not permitted to speak to the panel or participate directly in the hearing. Advisors who do not observe this restriction can be removed from the hearing by the Chair of the Disciplinary Hearing Panel.
7. If the student is a minor, the student's parent(s) or legal guardian must accompany him or her to the disciplinary hearing and may act on his or her behalf.
8. Witnesses shall not be present at the hearing when not testifying.
9. The student and the Dean of Student Support Services or designee may arrange for witnesses to present pertinent information to the Disciplinary Hearing Panel. Witnesses will provide information to and answer questions from the Disciplinary Hearing Panelists. All questions and responses are to be directed to the Panel, preferably the Chair, not between witnesses, complainant, and accused student.
10. If the complainant is unable to attend the hearing, his or her written statement will stand as his or her testimony.
11. The student and his or her advisor, if any, will be allowed to attend the entire portion of the hearing at which information is received, excluding deliberations of responsibility or sanctioning.
12. Should a student have an attorney present to advise him or her, the student must notify the Dean of Student Support Services or designee in writing at least five (5) business days prior to the Disciplinary Hearing of his or her intent to bring an attorney.
 1. The student discipline process is an administrative process, not a court-like trial or proceeding. Attorneys are allowed to serve as advisors in meetings, interviews, or hearings but may not speak on behalf of the complainant or accused student or speak to the Dean of Student Support Services or designee during the meeting, interview, or hearing. If complainants or accused students bring an attorney to a meeting, interview, or hearing, College personnel may request legal assistance.
13. In hearings involving more than one student in the same situation, the Dean of Student Support Services or designee may permit the hearings concerning each student to be conducted jointly.
14. Supporting documentation, including pertinent records, exhibits and written statements may be accepted as information for consideration at the discretion of the Chair. Prior student conduct violations may be considered in a hearing and for determination of sanctions.
15. Questions of whether potential information will be received will be resolved at the discretion of the Chair. All procedural questions are subject to the final decision of the Chair.
16. The Panel will determine whether the student is responsible for violating each section of the Standards of Student Conduct which the student is accused of violating. The Panel's determination will be made on the basis of whether it is more likely than not (preponderance of evidence) that the student violated the Standards of Student Code. The Panel will then determine what sanctions they deem appropriate for such violations.
17. Hearings (excluding deliberations) will be audio-recorded and made a part of the student's conduct file.
18. The Chair will prepare a written report detailing the finding, the vote, the information cited by the Panel in support of its findings and any information the Panel excluded and why, concluding with any recommended sanctions. The Chair will forward this document to the Director of Student Development or designee within five (5) business days upon the conclusion of the hearing.

Additionally:

1. Complainants are to be notified when written notice of the allegation/hearing is delivered to the accused student.
2. All parties to an allegation have a right not to face questions or discussion of their history or character unless the Hearing Panel Chair determines that such information is highly relevant to determining whether the policy has been violated.
3. Each party has the right to be present for all testimony and questioning. However, if requested, the Hearing Panel must make arrangements so that the complainant and accused are not in the same room at the same time.
4. The College must not require a complainant to be present as a prerequisite for the hearing to proceed or sanctions imposed.
5. Neither party is allowed to cross-examine each other or witnesses. All questions must be submitted to the Hearing Panel Chair.
6. Both parties have the right to appeal the decision of the panel.

7. The hearing shall be recorded by the College District by tape recording, and shall be the only recording made. No witness who refuses to be recorded may be permitted to give testimony. In the event the recording is by tape recording, the Hearing Panel Chair shall, at the beginning of the hearing, ask each person present to identify themselves by name, and thereafter shall ask witnesses to identify themselves by name. The tape recording shall remain in the custody of the College District at all times, unless released to a professional transcribing service. The student may request a copy of the tape recording.

Special Provisions for Sexual and Gender-Based Misconduct

Cases of alleged sexual and gender-based misconduct as defined in Board Policy 3540 and Administrative Procedure 3540 will be directed to the Title IX Coordinator for review and investigation. The Title IX Coordinator will work in coordination with the Director of Student Development or designee to address any violations to the Standards of Student Conduct that are in addition to the allegations of sexual and/or gender-based misconduct as outlined below.

Sexual and gender-based misconduct includes, but is not limited to:

1. Bullying
2. Dating Violence
3. Discrimination
4. Domestic Violence
5. Intimidation
6. Retaliation
7. Sexual Assault
 1. Non-consensual sexual contact
 2. Non-consensual sexual intercourse
8. Sexual Exploitation
9. Sexual Harassment
 1. Hostile environment caused by sexual harassment
10. Stalking
11. Threatening or causing abuse including physical and verbal
12. Violence between those in intimate/dating relationships to each other

Notice of the Decision

The Dean of Student Support Services or designee shall provide the student written notice of the final resolution of charged violation(s). The written notice shall be sent to the student by certified mail, return receipt requested, or receipted for personal delivery or via El Camino College issued e-mail account with delivery notification, within five (5) business days of the written findings and decision of the Student Disciplinary Hearing Panel. In cases alleging gender-based or sexual misconduct, the complainant will receive comparable notice of the relevant findings and sanctions from the Title IX Coordinator or designee.

1. The written notice to the student shall include:
 1. The specific provision of the Standards of Student Conduct that was violated
 2. The sanction(s) imposed and the date(s) on or periods for which they are in effect
 3. A statement of the student's right to appeal in writing to the Vice President of Student Services
 4. A statement that the failure to file a request for such an appeal within the time provided shall be deemed a waiver of the right to an appeal.

Appeals to the Vice President of Student Services

An appeal to the Vice President of Student Services or designee as a result of a Student Disciplinary Hearing Panel may be filed on the following grounds:

1. Proper procedures were not followed
2. There is new relevant evidence not reasonably available at the time of the hearing or the imposition of the sanction(s)
3. The evidence does not clearly support the finding(s)
4. The sanctions are inappropriate relative to the violation
5. Discrimination as defined in Board Policy 3410 and Administrative Procedure 3410

In cases alleging a violation of gender-based or sexual misconduct, both the accused student and the complainant have the right to appeal the findings of responsibility and/or sanctions based on the above criteria.

An appeal must be submitted in writing to the Vice President of Student Services or designee within five business days of receiving written notification of the hearing decision. The Vice President or designee will review the appeal and the hearing findings and may make a decision to uphold, reverse, revise, or modify the decision and sanctions imposed on the student.

The Vice President or designee will notify the student in writing by certified mail, with registered receipt, or via El Camino College issued e-mail account with delivery notification within ten (10) business days following receipt of the request for appeal of his or her decision.

The decision of the Vice President of Student Services or designee shall be final, except in the case of expulsion.

Procedures for Expulsion

The Board of Trustees is authorized to expel a student for good cause when other means of correction fail to bring about proper conduct or when the presence of the student causes a continuing danger to the physical safety of others. The notice of expulsion will be sent to the student with copies to the student file, Director of Student Development or designee, Dean of Student Support Services or designee, Director of Admissions & Records or designee, Vice President of Student Services or designee, Superintendent/President or designee, and El Camino College Campus Police Department. In the event the Vice President or designee has determined that he or she will seek a student's expulsion, the following procedures will be followed:

1. Recommendation for Expulsion:
 1. If the Vice President of Student Services or designee determines that the student should be expelled, he or she shall deliver a written recommendation for the student's expulsion to the Superintendent/President. A copy of the Vice President of Student Services or designee's recommendation shall be provided to the student or, if the student is a minor, to his or her parent or guardian. The Vice President or designee's recommendation for expulsion shall contain a statement of the charges against the student that provide the basis for his or her request that the student be expelled, including a factual description of the conduct upon which the charges are based, the action(s) taken by the Student Conduct Administrator and the recommendation of the Student Disciplinary Hearing Panel.
 2. The Board of Trustees shall consider any recommendation from the Superintendent/ President for expulsion at the next regularly scheduled meeting of the Board of Trustees after receipt of the recommended decision. The Board shall consider any expulsion recommendation in closed session, unless the student has requested that the matter be considered in a public meeting in accordance with these procedures (Education Code Section 72122).
 3. The student shall be notified in writing, by registered or certified mail, by personal service, or via El Camino College issued e-mail account with delivery notification at least five (5) business days prior to the meeting, of the date, time, and place of the Board of Trustees' meeting. The student may, within forty-eight hours (48) after receipt of the notice, request that the hearing be held as a public meeting. Even if a student has requested that the Board consider an expulsion recommendation in a public meeting, the Board will hold any discussion that might be in conflict with the right to privacy of any student other than the student requesting the public meeting in a closed session.
 4. The Board may accept, modify, or reject the findings, decisions, and recommendations of the Superintendent/President. If the Board modifies or rejects the decision, the Board shall review the record of the hearing, and shall prepare a new written decision which contains specific factual findings and conclusions. The decision of the Board shall be final. The final action of the Board on the expulsion shall be taken at a public meeting and the result of the action shall be a public record of the College District.
 5. The Vice President of Student Services or designee shall notify the student in writing within five (5) business days of the decision made by the Board of Trustees. The decision of the Board of Trustees shall be final.
 6. The final action by the Board of Trustees on the expulsion shall be taken at the public meeting, and the result of the action shall be a public record of the College District.

General Provisions

1. Failure of Student to Participate
Student conduct procedures under this policy may proceed or continue notwithstanding the failure or refusal of a student to respond, attend, or otherwise participate after having been properly notified of the proceeding as provided herein.
2. Technical Departures from this Policy
Technical departures from this policy shall not be grounds to void the College District's right to take disciplinary action against a student; unless the technical departure or error prevented a fair determination of the issue.
3. Time Limits
Any times specified in this administrative procedure may be shortened or lengthened if there is mutual concurrence by all parties.

Access to Records and Release of Information

Family Educational Rights and Privacy Act of 1974

All education records of students who enroll at El Camino College are kept in accordance with the provisions of the Family Educational Rights and Privacy Act of 1974. A student may request access to his or her education record which personally identifies the student and may challenge the accuracy of the record or the appropriateness of its retention. Student consent is needed for the release of records covered by the act to outside parties (e.g., prospective employers) except for those agencies entitled to access under the provisions of the act (e.g., campus officials, other schools, federal educational and auditing officials, and requests in connection with the application or receipt of financial aid). These provisions apply to records received and used after Nov. 19, 1974.

Students may request a copy of a record that the student has requested or consented to be released. The full text of the Family Educational Rights and Privacy Act of 1974 is in the United States Code Annotated, Title 20, 1232g, pocket part, in the campus library reference room. Particular questions with respect to a student's prerogative under the Family Educational Right and Privacy Act of 1974 should be directed to the office of the Director, Admissions and Records.

Student Information

In accordance with Education Code Section 54626: information may be made available to newspaper, magazine, radio, or television media and prospective employers for the purpose of reporting a student's participation in officially recognized college activities and sports events or the student's receipt of college degrees and awards.

Information may include the student's name, address, telephone listing, date and place of birth, major field of study, class schedule, dates of attendance, weight and height of members of athletic teams, and the most recent previous educational institution attended by the student. The names and addresses of students may be provided to public or private schools or colleges for purposes directly related to the academic or professional goals of the institution.

A student who does not wish any or all of the information to be made available without prior consent must file a petition in the Admissions Office at the time of enrollment or before the beginning of classes, requesting that this information be withheld.

Notice of Non-Discrimination

The policy of the El Camino Community College District is, in part, to provide an educational and employment environment in which no person shall be unlawfully denied admission, access or benefit to, nor employment in any program or activity that is administered, funded directly by, or that receives any financial assistance from the State Chancellor or Board of Governors of the California Community Colleges on the basis of race, color, national origin, sex (including sexual harassment), gender, disability, and age as required by Title VI, Title IX, Section 504, the Age Discrimination Act.

Employees, students or other persons acting on behalf of the District who engage in unlawful discrimination as defined in this policy or by state or federal law may be subject to discipline up to and including expulsion or termination. Any retaliation against a person for filing a discrimination charge or making a discrimination complaint is prohibited.

The District has identified the Director of Staff and Student Diversity as the designated responsible employee for receiving all complaints of discrimination, harassment and retaliation and the designated coordinator under the ADA/Section 504, Title IX and the Age Discrimination Act. Inquiries regarding compliance with these statutes, and complaints may be directed to the Director of Staff and Student Diversity by calling 310-660-3593, ext. 3813.

Unlawful Discrimination Complaints

The College affirms its policy to provide an educational and employment environment in which no person shall be unlawfully denied admission, access or benefit to, nor employment in any program or activity that is administered, funded directly by, or that receives any financial assistance from the State Chancellor or Board of Governors of the California Community Colleges on the basis of race, color, national origin, sex (including sexual harassment), gender, disability, and age as required by Title VI, Title IX, Section 504, the Age Discrimination Act. Students or employees with questions, concerns or complaints of unlawful discrimination may contact and/or file a complaint with these offices.

Las Quejas por Discriminación Illegal

El Colegio reafirma su política de ofrecer una educación y entorno laboral en el que ninguna persona podrá ser ilegalmente ha negado el ingreso, el acceso o beneficio, ni empleo en cualquier programa o actividad que se administra, financiados directamente por, o que recibe ayuda financiera del Canciller del Estado o la Junta de Gobernadores de California Community Colleges sobre la base de raza, color, origen nacional, sexo (como el acoso sexual), el género, la discapacidad, la edad o según se requiera por el Título VI, Título IX, Sección 504, la Ley de discriminación por edad. Estudiantes o empleados con preguntas, preocupaciones o quejas de discriminación ilegal puede ponerse en contacto con y/o presentar una queja con estas oficinas.

Students and employees may file an official complaint with the appropriate offices or agencies to initiate an El Camino College discrimination investigation:

- El Camino College Director of Staff and Student Diversity
Administration Building, Room 210
310-660-3593, ext. 3813 (Students/Employees)
- California Community Colleges System Office
Attention: Legal Affairs Division
1102 Q Street, Sacramento, CA 95814-6511 (Students/Employees)
- U.S. Department of Education, Office for Civil Rights
50 Beale Street, Suite 7200
San Francisco, CA 94105 (Students)
- California Department of Fair Employment and Housing
611 W. Sixth Street, Suite 1500
Los Angeles, CA 90017 (Employees)
- U.S. Equal Employment Opportunity Commission
255 E. Temple Street, 4th Floor, Los Angeles, CA 90012 (Employees)

Sexual and Gender-Based Misconduct

Including Sexual Assault, Sexual Harassment, and Dating Violence

It is the policy of the El Camino Community College District to provide an education, employment, and business environment free of sexual and gender-based misconduct, including sexual assault, domestic and dating violence, stalking, and sexual harassment such as unwelcome sexual advances, requests for sexual favors, as well as any other unlawful sexual or gender-based verbal or physical conduct or communications as defined and otherwise prohibited by state and federal law.

Sexual and gender-based misconduct violates the policy of the District and provisions of the California Fair Employment Act, Education Code and federal rules, regulations and laws prohibiting sexual and gender-based misconduct, including sexual assault, sexual harassment, domestic and dating violence, and stalking. Sexual and gender-based misconduct shall be immediately reported to the District's Title IX Coordinator, or designee, or to any dean, director, or manager for immediate reporting to the Title IX Coordinator. Detailed information, including resources and Title IX procedures, is available in the Office of Staff and Student Diversity, Administration Building, Room 210 and online at www.elcamino.edu/administration/hr/diversity/misconduct.asp.

Students may review the Administrative Procedure for Board Policy 3540 on the El Camino College website www.elcamino.edu/administration/board/policies.asp.

Reporting of Crimes

Board Policy 3515

The Superintendent/President shall assure that, as required by law, reports are prepared of all occurrences reported to Campus Police and arrests for crimes committed on campus that involve violence, hate violence, theft or destruction of property, illegal drugs, or alcohol intoxication. The Superintendent/President shall further assure that required reports of non-criminal acts of hate violence are prepared. Such reports shall be made available as required by state and federal law.

Annual Security Report

In accordance with the requirements of the Jeanne Clery Disclosure of Campus Security Policy and Crimes Statistics Act, El Camino College is required to publish and distribute an annual security report containing campus security policies and procedures as well as campus crime statistics. The security report will include data on arrests and crimes committed on campus or at campus-sponsored events. In addition, other information related to reporting crimes or suspicious behavior; describing campus security and

crime prevention programs and materials; and the college's substance abuse education program will be included for distribution. Information is available on the college website: www.elcamino.edu/police/. These materials will be distributed annually to all employees and students, and be available upon request to applicants for enrollment or employment.

Academic Regulations

Grading and Academic Record Symbols

Board Policy 4230

Courses shall be graded using the grading system established by Title 5 section 55023. The grading system shall be published in the college catalog and made available to students.

Administrative Procedure 4230

The grading practices of the El Camino Community College District shall be as follows:

Semester Unit of Credit

College work at El Camino College is measured in terms of semester units. One unit of credit is awarded for approximately 54 hours of lecture, study or laboratory work. The amount of credit awarded shall be adjusted in proportion to the number of hours of lecture, study or laboratory work.

Grade Records

Instructors will maintain records required by the District and report grades in a timely manner based on District procedures, as per the Instructor Position description. Instructors shall maintain a careful record of graded assignments and, to support the grade assigned for the course, the grade roster should have a minimum of three grades plus the final examination grade for each student.

Grades, Grade Points, and Grade Point Average:

Grade points are numerical values, which indicate the scholarship level of letter grades. The grade point average equals total grade points divided by total units attempted for credit courses in which letter grades have been assigned. Grade points are assigned according to the scale in the chart below and shall be published in the college catalog.

Evaluative Symbols

A	Excellent	4 points for each unit
B	Good	3 points for each unit
C	Satisfactory	2 points for each unit
D	Passing, less than satisfactory	1 point for each unit
F	Failing	0 points for each unit
P	Pass, at least satisfactory	See Note 1
NP	No Pass, less than satisfactory (formerly NC No Credit)	See Note 1
I	Incomplete	See Note 2
IP	In Progress	See Note 3
W	Withdrawal	See Note 4
MW	Military Withdrawal	See Note 5
RD	Report Delayed	See Note 6

Notes:

1. **P/NP - Pass-No Pass (formerly CR/NC for Credit/ No Credit)**

A certain number of courses are offered only on a P/NP basis while some others are offered on a P/ NP or letter grade option depending on which the student selects by the fourth week of a 16-week class or 25 percent of a class. A student earning a P grade will receive unit credit toward graduation if the course is degree applicable. Unit credit earned in P/NP courses will not be considered when calculating grade point average. Designation of P/ NP or option P/NP grading is

included in the course description. All grades in credit courses except W and P/NP will be considered in determining the grade point average. While NP and W grades are not used in grade point determination, a student with an excessive number of withdrawals or NPs is subject to probation or dismissal regulations.

2. **I-Incomplete**

A student may receive a notation of "I" (Incomplete) and a default grade when a student did not complete his or her academic work for unforeseeable, emergency, and justifiable reasons. The Incomplete grade to be assigned by the instructor and designated on the student's transcript will be IB, IC, ID, or IF. Collectively, these grades will be referred to as an "I" grade. If the student does not complete the required work by the end of the sixth week, the "I" will automatically be removed and the default grade will be assigned. Any extension of the time for completion of the required work must be approved by the division dean.

3. **IP-In Progress**

The "IP" symbol shall be used only in those courses, which extend beyond the normal end of an academic term. It indicates that work is "in progress," but that assignment of an evaluative symbol (grade) must await its completion. The "IP" symbol shall remain on the student's permanent record in order to satisfy enrollment documentation. The appropriate evaluative symbol (grade) and unit credit shall be assigned and appear on the student's permanent record for the term in which the course is completed. The "IP" shall not be used in calculating grade point averages. If a student enrolled in an "open-entry, open-exit" course is assigned an "IP" at the end of an attendance period and does not re-enroll in that course during the subsequent attendance period, the appropriate faculty will assign an evaluative symbol (grade-A through F, P or NP) to be recorded on the student's permanent record for the course.

4. **W-Withdrawal**

It is the student's responsibility to process a withdrawal. A student may also be dropped by the instructor if the student has excessive absences. Withdrawal from classes is authorized through the 12th week of instruction in a 16-week class, or 75 percent of a class, whichever is less. If a student remains in class beyond the published withdrawal date, an evaluative symbol (grade-A through F, P or NP) or an "I" (Incomplete) shall be assigned. A student who must withdraw after the published withdrawal date, due to extenuating circumstances may petition for assignment of a "W." Extenuating circumstances are verified cases of accidents, illnesses or other circumstances beyond the control of the student.

No notation ("W" or other) shall be made on the academic record of the student who withdraws prior to the close of the second week of a 16-week class, or 20 percent of a class, whichever is less. Any withdrawal occurring after the published No Notation date shall be recorded as a "W" on the student's record.

The "W" shall not be used in calculating grade point averages, but excessive "W's" shall be used as factors in probation and dismissal procedures.

5. **MW-Military Withdrawal**

Military Withdrawal occurs when a student who is a member of an active or reserve United States military service receives orders compelling a withdrawal from courses. Upon verification of such orders, the student may be assigned "MW." Military withdrawals shall not be counted in the limitation on excessive withdrawals nor in progress probation and dismissal calculations.

6. **RD - Report Delayed**

The "RD" symbol may be assigned by the registrar only. It is to be used when there is a delay in reporting the grade of a student due to circumstances beyond the control of the student. It is a temporary notation to be replaced by a permanent symbol as soon as possible. "RD" shall not be used in calculating grade point averages.

Grade Change

Board Policy 4231

When grades are given for any course of instruction taught in the El Camino Community College District, the grade given to each student shall be the grade determined by the instructor of the course, and the determination of the student's grade by the instructor, in the absence of mistake, fraud, bad faith, or incompetency, shall be final.

A student who alleges that a grade in a course was given as a result of mistake, fraud, bad faith, or incompetency may appeal the grade within 18 months of the last day of the term in which the grade was posted.

Upon determination by the District that a grade in a course was given as a result of fraud, the District may change or remove the fraudulent grade from the student's transcript of record based on the recommendation of a faculty committee. Such action may be initiated upon determination of the fraud without regard to the time limits imposed on other grade appeal actions.

Procedures for changing or removing grades in accordance with this policy have been developed by the President/Superintendent or his designees in collegial consultation with the Academic Senate.

This policy supersedes the section of BP 4220 that deals with grade change procedures.

Grade Change Administrative Procedure 4231

Students may review the Administrative Procedure for Board Policy 4231 on the El Camino College website www.elcamino.edu/administration/board/policies.asp.

Limitation to Remedial Coursework

Board Policy 4115

It is the policy of El Camino College that a student shall not receive credit for more than 30 units of remedial (pre-collegiate basic skills) course work at El Camino College. This limitation does not apply to:

1. A student enrolled in an English as a Second Language course
2. A student identified as having a learning disability

A student may be granted a waiver to the 30-unit limit upon petition. Waivers will be granted only if the student shows measurable progress towards the development of skills necessary for success in college-level courses.

Procedures for implementing this policy will be developed by the Superintendent/President in collegial consultation with the Academic Senate.

Prerequisites and Corequisites

Board Policy 4260

The Superintendent/President is authorized to establish prerequisites, corequisites and advisories on recommended preparation for courses in the curriculum. All such prerequisites, corequisites and advisories shall be established in accordance with the standards set out in Title 5. Any prerequisites, corequisites or advisories shall be necessary and appropriate for achieving the purpose for which they are established. The procedures shall include a process by which a prerequisite or corequisite may be challenged by a student on grounds permitted by law. Prerequisites, corequisites and advisories shall be identified in District publications available to students.

Procedures for implementing the policy will be developed in collegial consultation with the Academic Senate, as defined in CCR § 53200.

Administrative Procedure 4260

Students may review the Administrative Procedure for Board Policy 4260 on the El Camino College website www.elcamino.edu/administration/board/policies.asp.

Probation, Dismissal and Readmission

Board Policy 4250

El Camino College has two types of probation: Academic Probation and Progress Probation. The purpose of probation is to encourage a student having academic difficulties to seek appropriate guidance and support in formulating and achieving goals.

1. **Placement on Academic Probation**

A student who has attempted at least 12 semester units of letter graded course work, as shown by the academic record, will be placed on Academic Probation when the grade point average for total units attempted at El Camino College is less than 2.0.

2. **Removal from Academic Probation**
A student will be removed from Academic Probation when the cumulative grade point average is 2.0 or higher in total units attempted at El Camino College.
3. **Placement on Progress Probation**
A student who has enrolled in 12 or more semester units as shown by the official academic record will be placed on Progress Probation if entries of "W," "I," "NC" and/or "NP" account for 50 percent or more of the total units attempted. Courses dropped prior to the "No Notation" deadline are not considered "units attempted" and do not receive entries as "W" "I," or "NC/NP."
4. **Removal from Progress Probation**
A student will be removed from Progress Probation when the percentage of entries of "W," "I," "NC" and/ or "NP" drops below 50 percent of the total units attempted.
5. **Dismissal Because of Academic Probation**
A student on Academic Probation will be dismissed if the student earned a cumulative grade point average of less than 2.0 in all letter graded credit units attempted in each of three consecutive semesters. However, if a student achieves a 2.0 or higher during the most recent regular (fall, spring) semester while on probation, the student will continue on probation, but will not be subject to dismissal. Terms shorter than 16 weeks (i.e. winter, summer) will not be considered a semester. A semester in which the student does not take any courses will not be counted as a semester.
6. **Dismissal Because of Progress Probation**
A student on Progress Probation will be dismissed if the percentage of units in which the student has been enrolled for which entries of "W," "I," "NC and/or "NP" remains at or above 50 percent for three consecutive semesters. However, if a student completes 50 percent or more of the attempted units during the most recent regular (fall, spring) semester while on probation, the student will continue on probation, but will not be subject to dismissal. Terms shorter than 16 weeks will not be considered a semester. A semester in which the student does not take any courses will not be counted as a semester.
7. **Appeal of Probation or Dismissal**
A student who believes that there are extenuating circumstances that warrant an exception to the probation and dismissal standards set forth in this policy may submit a written appeal with supporting documentation in compliance with administrative procedures. Dismissal may also be postponed if student can show significant improvement in the last semester.
8. **Readmission Following Dismissal**
A student who has been dismissed may return after sitting out at least one 16-week semester. A readmitted student will remain on probation until the cumulative average is above 2.0 and/or the percentage of "W," "I," "NC" and/or "NP" entries is below 50 percent.

Procedures for implementing the policy will be developed in collegial consultation with the Academic Senate.

Probation, Dismissal and Readmission

Administrative Procedure 4250

1. A student who is placed on Academic or Progress Probation or who is dismissed from the college will be notified in writing and will be informed of college support services available.
2. A student who is on Academic or Progress Probation for two or more consecutive semesters is limited to no more than 12 units in any semester of 16 weeks or more, and no more than 5 units in any session shorter than 16 weeks (i.e. winter or summer session). Under special circumstances, a student may petition for additional units through the Counseling and Student Success Office.
3. A student who is on Academic or Progress Probation for two or more consecutive semesters or who is returning to El Camino after having been dismissed is required to see a counselor before registering for subsequent semesters. If the student has not attended for one or more semesters, an application for readmission is necessary.
4. The student has the right to appeal dismissal.
 1. The student must file the written petition of appeal with the Counseling and Student Success office within the time limit noted on the dismissal letter. If the student fails to file a written petition within the specified period, the student waives all future rights to appeal the dismissal and must sit out that semester.

2. It is the student's responsibility to indicate on the petition a clear statement of the grounds on which continued enrollment should be granted and to provide evidence supporting the reasons.
3. Petitions will be reviewed by the Reinstatement Committee. The student will be notified of the Committee's action in a timely manner (usually within 7 business days).
4. The student may appeal the Committee's decision in writing to the Counseling and Student Success office within 21 calendar days of the date of notification. The decision of the Counseling and Student Success office is final.
5. A readmitted student will remain on probation until the cumulative average is 2.0 or above and/or the percentage of "W," "I," and "NC/NP" entries are below 50%. A student who withdraws from ECC voluntarily while on probation will be readmitted in the same status that existed at the time of withdrawal.

Academic Renewal Policy and Procedures

Board Policy 4240

The Superintendent/President shall, in consultation with the appropriate groups, develop procedures that provide for academic renewal. It is the policy of El Camino College to allow previously recorded substandard academic work to be disregarded if it is not reflective of a student's more recently demonstrated ability and if repetition is not appropriate to the current objectives of the student.

Procedures for implementing the policy will be developed in collegial consultation with the Academic Senate.

Academic Renewal Administrative Procedure 4240

Students may review the Administrative Procedure for Board Policy 4240 on the El Camino College website www.elcamino.edu/administration/board/policies.asp.

Academic Freedom

Board Policy 4030

The El Camino Community College District recognizes that institutions of higher education are conducted for the common good and not to further the interest of either the individual faculty member 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. Academic freedom is fundamental for the protection of the rights of the faculty member in teaching and of the student in learning. It carries with it responsibilities correlative with rights. Accordingly, a faculty member shall have the freedom:

1. To examine or endorse unpopular or controversial ideas either in classroom teaching or in discussions with students as is appropriate to the course content, or in academic research or publication, while recognizing the responsibility to be accurate, objective and respectful of others. Faculty also have the responsibility to grade students solely on the basis of evidence of knowledge of the material pertinent to the class and attainment of appropriate skills, or other generally accepted grading criteria, avoiding any bias generated by a student's political outlook, religious belief or other personal attributes.
2. To select or recommend the selection of course instructional materials that may contain unpopular or controversial ideas, with the correlative responsibility that these materials are pertinent for the course.
3. To speak or write as a citizen, provided that the faculty member recognizes the special professional obligations of an educator to be accurate, objective and respectful of others, and that the faculty member takes care to avoid leaving the impression that he or she is speaking for the College or the district.
4. To select or recommend library books, materials, media and online resources representing a multiplicity of philosophies and points of view, relying on professional expertise to maintain appropriate depth and breadth of the collections.

A faculty member shall not be subject to any adverse action affecting his or her employment with the El Camino Community College District for exercising any of the foregoing choices.

Procedures for implementing the policy will be developed in collegial consultation with the Academic Senate.

Course Repetition

Board Policy 4225

The Superintendent/President or designee will have the authority to develop and implement policy and procedures with regards to repeatable and non-repeatable courses within the district. Such policies and procedures will be developed in accordance with state, federal and/or district regulations.

Repeatable courses with the designation of "ab, abc, or abcd" may be taken more than once for credit. El Camino College designates as repeatable courses for which repetition is necessary to meet the lower-division major requirements of CSU or UC for completion of a Bachelor's Degree, intercollegiate athletics and related conditioning courses, and intercollegiate academic or vocational competition courses.

Non-repeatable courses may be taken only once for credit. Students may retake a non-repeatable course in which they have received a substandard grade (D, F, NP or NC) or Withdrawal (W) only once before college intervention.

Under special circumstances, students may repeat courses in which a grade of C or better was earned. These special circumstances and other specific exceptions to the above policies are detailed in administrative procedures.

When course repetition occurs, the permanent academic record shall be annotated in such a manner that all work remains legible, insuring a true and complete academic history.

Procedures for implementing the policy will be developed in collegial consultation with the Academic Senate.

Course Repetition Administrative Procedure 4225

Students may review the Administrative Procedure for Board Policy 4225 on the El Camino College website www.elcamino.edu/administration/board/policies.asp.

Course Repetition Policy and Active Participatory Course Limitations

Repetition occurs when a student who has previously received an evaluative symbol (grade) in a particular credit course re-enrolls in that same course and receives another evaluative symbol. Credit course repetition is regulated by state guidelines as described in Title 5 of the California Code of Regulations, Sections 55040-55046.

Students may repeat credit courses at El Camino College under specific circumstances as outlined in Board Policy 4225 and Administrative Procedure 4225. There are three general circumstances when a course may be repeated:

1. when a course is specifically designed as repeatable;
2. when a student earns a substandard grade (D, F, or NP) or a Withdrawal (W) is assigned, and the student wants to retake the course to earn a passing grade; and
3. when a student meets the criteria for special circumstances.

Repeatable Courses

Repeatable courses are those listed in the College Catalog that have lowercase letters in the course number. The lowercase letters indicate the number of times a course may be repeated. Examples of repeatable courses include Physical Education 60abc (Women's Intercollegiate Soccer Team) and Communication Studies 293abcd (Forensics - Team Events). In these examples, students may enroll in Physical Education 60abc three times and Communication Studies 293abcd four times.

El Camino College designates only the following types of courses to be repeatable per Title 5:

1. Courses for which repetition is necessary to meet the lower-division major requirements of CSU or UC for completion of a Bachelor's Degree (Title 5, Section 55041(a)(1)).
2. Intercollegiate athletics and related conditioning courses (Title 5, Section 55041(b)(2)).
3. Intercollegiate academic or vocational competition (Title 5, Section 55041(a)(3)).

For additional information regarding the scope and limitations of repeatable courses, refer to the Administrative Procedure for Board Policy 4225 on the El Camino College website www.elcamino.edu/administration/board/policies.asp.

Course Repetition to Alleviate a Substandard Grade

Students may retake a non-repeatable course in which they have one unsuccessful attempt only once without College intervention. An unsuccessful attempt occurs when a student receives a Withdrawal or a substandard grade (D, F, or NP). Students may retake a non-repeatable course in which they have two unsuccessful attempts only after completing College intervention. This intervention involves a student petition, which is reviewed on a case-by-case basis by the appropriate dean and/or the Admissions Office. The petition form can be obtained in the appropriate academic division office. Students are limited to a maximum of three (3) enrollments in a course unless otherwise specified in Title 5, Sections 55040-55046.

A passing or substandard grade received in the retake shall replace the original grade in the calculation of the grade point average, except under circumstances specified in Title 5, Section 55040(b)(6)(8)(9). This will be annotated on the student's academic transcript. The original grade, alleviated by the new grade, must remain on the student's academic transcript.

A maximum of two substandard grades will be excluded in computing the student's grade point average (Title 5, Section 55042).

In general, students are not permitted to repeat courses in which they have earned a grade of A, B, C, or P except due to Special Circumstances as described below.

Special Circumstances

Students may only petition to repeat a course beyond the maximum allowed enrollments under the following conditions:

1. Significant Lapse of Time (Title 5, Section 55040(b) (3), 55043): Students may petition to repeat a class if it is determined that a significant lapse of time (no less than 36 months) has occurred since the last time the student was enrolled in the course. The course must be required by the district as a recency prerequisite or another institution of higher education as to which the student seeks to transfer has established a recency prerequisite which the student will not be able to satisfy without repeating the course in question.
2. Variable Unit Open-Entry/Open-Exit Courses (Title 5, Section 55040(b)(4), 55044): Enrollments are limited to the number of times necessary for a student to complete one time the entire curriculum of the course as described in the corresponding course outline of record.
3. Extenuating Circumstances (Title 5, Section 55040(b)(5), 55045): Students may petition to repeat a course due to verified cases of accidents, illness, or other circumstances beyond the control of the student. The grade achieved by the student in the previous enrollment can be substandard or passing (A, B, C, D, F, or NP). A student receiving a non-evaluative grading symbol (I, IP, RD, W, or MW) cannot re-enroll in a course as a result of extenuating circumstances.
4. Occupational Work Experience (Title 5, Section 55040(b)(6)): Districts may permit students to enroll multiple times in an occupational work experience course if certain conditions are met as outlined in Title 5, Section 55253.
5. Special Classes for Students with Disabilities (Title 5, Section 55040(b)(7)): Special classes designed for students with disabilities may be subject to extensions of repeatability in certain circumstances. Repetition may be authorized based on a case-by-case determination related to the student's educational limitation pursuant to state and federal non-discrimination laws. The determination must be based on one of the following circumstances as specified in Title 5, Section 56029:
 1. when continuing success of the student in other general and/or special classes is dependent on additional repetitions of a special class,
 2. when additional repetitions of a specific class are essential to completing a student's preparation for enrollment into other regular or special classes, and
 3. when the student has a student educational contract which involves a goal other than completion of the special class in question and repetition of the course will further achievement of that goal.
6. Legally Mandated Courses (Title 5, Section 55040(b) (8)): Students are allowed to repeat a course when the repetition is necessary to enable students to meet a legally mandated training requirement as a condition of volunteer or paid employment. Students can repeat such courses any number of times, even if they received a grade of C or better; however, the grade and credit earned by the student each time will be included in calculations of the student's grade point average.
7. Significant Change in Industry or Licensure Standards (Title 5, Section 55040(b)(9)): Students may petition the district to repeat a course as a result of a significant change in industry or licensure standards such that repetition of the course is necessary for employment or licensure. Students can repeat such courses any number of times, even if they received a grade of C or better; however, the grade and credit earned by the student each time will be included in calculations of the student's grade point average.

Active Participatory Course Limitations - Course Families

Prior to fall 2013, students were able to repeat active participatory courses in the areas of Art, Dance, Theatre, Music, and Physical Education (PE). However, as of fall 2013, all active participatory courses are non-repeatable and can only be taken one time subject to the limitations set forth in Title 5, Section 55040(c).

While students will not, in most cases, be allowed to repeat an active participatory course, they will still be allowed to enroll in a series of active participatory courses that are related in content (commonly referred to as a family of courses). However, students will be limited to taking a maximum of four courses in any one family of courses. This limitation does not contain a grandfather clause and includes courses taken both before and after fall 2013. Therefore, if a student has reached the maximum four enrollments within a family, regardless of grade or W, then he/she cannot enroll in any course within the family again within the El Camino Community College District.

All grades, including Ws, will count toward the four-course enrollment limitation and for computing the grade point average (GPA). Students can repeat Art, Dance, Drama, Music, and PE courses that are included in Families of Courses in which a D, F, or NP grade was earned or a W was assigned; however, all enrollments count toward the four-enrollment maximum for each family of courses.

PHYSICAL EDUCATION PROGRAM COURSE FAMILIES			
Cardiorespiratory Training Family	PE 2 - Walking for Fitness PE 245 - Water Aerobics PE 254 - Aerobic Fitness PE 404 - Adapted Cardiovascular Fitness	Racquet Sports Family	PE 204 - Badminton PE 251 - Tennis
Combatives Family	PE 18A - Boxing PE 220 - Naginata: A Japanese Martial Art PE 221 - Combative Arts and Self Defense	Resistance Training Family	PE 54 - Weight Training PE 259 - Circuit Training PE 401 - Adapted Strength Training
Cross Training Family	PE 3 - Boot Camp Fitness Training PE 10 - Body Conditioning and Physical Fitness PE 400 - Adapted Fitness	Swimming Family	PE 240A - Beginning Swimming PE 240B - Intermediate Swimming PE 240C - Advanced Swimming PE 249 - Swimming for Fitness PE 402 - Adapted Swimming and Hydroexercise
Individual Sport Family	PE 208 - Bowling PE 224 - Golf PE 407 - Adapted Bowling	Team Sports Family	PE 4 - Basketball PE 7 - Baseball PE 74 - Soccer PE 233 - Pep Squad and Cheer PE 234ab - Pep Squad and Cheer Competition PE 253 - Volleyball PE 255 - Beach Volleyball
Lifeguard Family	PE 247 - Swimming, Lifeguard Training PE 248 - Swimming, Water Safety Instructor	Yoga Family	PE 257 - Yoga for Health and Fitness PE 258 - Power Vinyasa Yoga PE 409 - Adapted Yoga
Outdoor Fitness Adventure Family	PE 47 - Introduction to Indoor Rock Climbing PE 250 - Techniques of Surfboard Riding		
ART PROGRAM COURSE FAMILIES			
Ceramics Family	Art 161 - Beginning Ceramics Art 262 - Intermediate Ceramics Art 263 - Advanced Ceramics	Painting Family	Art 222 - Fundamentals of Painting I Art 223A - Fundamentals of Painting II Art 223B - Fundamentals of Painting III
Drawing Family	Art 110 - Drawing Fundamentals I Art 210 - Drawing Fundamentals II	Printmaking Family	Art 187 - Printmaking I: Etching and Relief Art 288 - Printmaking II: Etching and Relief Art 289 - Lithography Art 290 - Screen Printing
Figure Painting Family	Art 224 - Life Painting I Art 225 - Life Painting II	Sculpture Family	Art 181 - Beginning Sculpture Art 282 - Life Sculpture
Jewelry Family	Art 173 - Introduction to Jewelry and Metalsmithing Art 274 - Jewelry Fabrication Art 275 - Jewelry Casting	Two-Dimensional Design Family	Art 130 - Two-Dimensional Design I Art 230 - Two-Dimensional Design II
Life Drawing Family	Art 217 - Life Drawing I Art 218A - Life Drawing II Art 218B - Life Drawing III	Watercolor Family	Art 219 - Watercolor Painting I Art 220 - Watercolor Painting II
DANCE PROGRAM COURSE FAMILIES			
Ballet Family	Dance 120A - Beginning Ballet A Dance 120B - Beginning Ballet B Dance 220A - Intermediate Ballet A Dance 220B - Intermediate Ballet B Dance 221 - Ballet Variations	Social Dance Family	Dance 167 - Social and Ballroom Dance Dance 168 - Latin Social Dance Dance 268 - Intermediate Latin Social Dance
Choreography Family	Dance 171A - Beginning Choreography A Dance 171B - Beginning Choreography B Dance 271A - Intermediate Choreography A Dance 271B - Intermediate Choreography B	Tap Dance Family	Dance 161 - Tap Dance I - Beginning Dance 261 - Tap Dance II - Intermediate

Jazz Dance Family	Dance 140 - Jazz Dance I Dance 240 - Jazz Dance II	World Dance Family	Dance 164 - World Dance Dance 165 - African Dance Dance 265 - Intermediate African Dance
Modern Dance Family	Dance 130A - Beginning Modern Dance A Dance 130B - Beginning Modern Dance B Dance 230A - Intermediate Modern Dance A Dance 230B - Intermediate Modern Dance B		
MUSIC PROGRAM COURSE FAMILIES			
Audition Preparation Family	Music 232 - Advanced Piano Music 290 - Intermediate Applied Music/Individual Lessons	Large Ensemble Family	Music 265abcd - Symphonic Band Music 268abcd - Symphony Orchestra
Beginning Instrument Family	Music 143 - Beginning Woodwind Instruments Music 144 - Beginning Brass Instruments Music 145 - Beginning Percussion Instruments Music 146 - Beginning String Instruments	Piano Family	Music 131A - Beginning Piano I Music 131B - Beginning Piano II Music 231A - Intermediate Piano I Music 231B - Intermediate Piano II
Choral Ensemble Family	Music 151abcd - Mixed Chorus Music 152abcd - Concert Choir Music 253abcd - Chorale Music 257abcd - Women's Chorus	Small Ensembles Family	Music 260abcd - Woodwind Ensembles Music 261abcd - Brass Ensembles Music 262abcd - Percussion Ensembles Music 264abcd - String Ensembles
Guitar Family	Music 147A - Beginning Guitar Music 147B - Beginning Guitar II Music 247 - Intermediate Guitar	Voice Family	Music 120 - Voice Class I Music 220 - Voice Class II Music 221 - Introduction to Lyric Diction for Singers
Jazz Large Ensemble Family	Music 266abcd - Studio Jazz Band Music 267abcd - Concert Jazz Band		
THEATRE PROGRAM COURSE FAMILIES			
Acting Family	Theatre 113 - Introduction to Acting Theatre 114 - Fundamentals of Acting Theatre 214A - Intermediate Acting Theatre 217 - Acting Shakespeare		

Field Trips and Excursions

Board Policy 4300

The Superintendent/President shall establish procedures that regulate the use of District funds for student travel and attendance at conferences and other activities that are performed as a class assignment or co-curricular activity.

The Superintendent/President, under authorization from the Board of Trustees, may authorize field trips and excursions for students in connection with courses of instruction or College-related social, educational, cultural, athletic or musical activities to and from places in California, or any other state, the District of Columbia, or a foreign country. The Superintendent/President may delegate the authority to the appropriate Vice President.

The District may pay for expenses of students participating in a field trip or excursion with auxiliary, grant or categorical program funds if the funds are used consistently with the funding source. The expenses of instructors, chaperones, and other personnel traveling with students may also be paid from District funds. No student shall be prevented from making a field trip or excursion which is integral to the completion of the course because of lack of sufficient funds.

Students and staff shall at all times adhere to the standards of conduct applicable to conduct on campus.

Additional Information

Throughout the school year, the District may sponsor voluntary field trips and excursions in which students may want to participate. Be advised, as stated in Title 5, Section 55220, if a student participates in a voluntary field trip or excursion, the student has deemed to hold harmless the District, its officers, agents and employees from all liability or claims, which may arise out of or in connection with the student's participation in this activity.

Instructional Materials Fees

Students may be required to provide instructional materials required for a credit or non-credit course. Such materials shall be of continuing value to a student outside of the classroom setting and shall not be solely or exclusively available from the District.

Required instructional materials shall not include materials used or designed primarily for administrative purposes, class management, course management, or supervision.

Where instructional materials are available to a student temporarily through a license or access fee, the student shall be provided options at the time of purchase to maintain full access to the instructional materials for varying periods of time ranging from the length of the class up to at least two years. The terms of the license or access fee shall be provided to the student in a clear and understandable manner prior to purchase.

For more information on Instructional Materials Fees and the Student Fee Handbook, please visit the Academic Affairs webpage www.elcamino.edu/administration/vpaa/instructional-materials-fee.asp.

Credit by Examination

Board Policy 4235

The El Camino Community College District is committed to allowing students to receive credit for a specific course by demonstrating mastery of the subject matter and/or skills by credit by exam.

Updated lists of courses eligible for credit by examination, as determined by appropriate faculty, shall be kept in the academic and counseling division offices as well as the records office. It shall be established that the knowledge, skills, and/or experiences gained outside the regular College curriculum are compatible with the course objectives for which credit is requested. Proficiency in subject matter or skills shall be assessed through examination, portfolio, or skills demonstration, and must be at the level expected of students who have successfully completed the course at El Camino College.

The eligibility and fee requirements, along with the procedures and restrictions for obtaining credit by examination, shall be on file in the Administrative Procedures Handbook. These are available in the College records office, counseling services, and all academic division offices. They are also published in the College Catalog and Schedule of Classes.

Eligibility Requirements

For eligibility requirements and procedure for earning credit by exam, visit the El Camino College Admissions webpage www.elcamino.edu/admissions/credit.asp.

Restrictions

Units earned by examination are not to be considered a part of the student's subject load. Units shall not be used for reports to Selective Service, Social Security, Veterans Affairs, or similar agencies and shall not be considered in verifying eligibility for athletics or student government.

Courses Eligible for Credit by Examination

Business

- BUS 60A - Microcomputer Keyboarding I 1 unit
- BUS 60B - Microcomputer Keyboarding II and Document Processing 1 unit

Computer Information Systems

- CIS 13 - Computer Information Systems 3 units

Health Sciences and Athletics Division

Contemporary Health

- CH 1 - Personal and Community Health Issues 3 units
- CH 3 - Drugs and Alcohol in Society 2 units

First Aid

- FAID 1 - First Aid, Cardiopulmonary Resuscitation (CPR) and Basic Emergency Care 3 units

Nursing

- NURS 144 - Dosage Calculations 2 units

- NURS 101 - Exploring Health Occupation Careers 2 units
- NURS 143 - Introduction to Nursing 2 units
- NURS 149 - Advanced Placement in Nursing 2.5 units
- NURS 150A - Beginning Nursing Process and Fundamental Skills I 4 units
- NURS 150B - Beginning Nursing Process and Fundamental Skills II 3.5 units
- NURS 151 - Human Development and Health 2 units
- NURS 152 - Introduction to Nursing Pharmacology 1 unit
- NURS 153 - Intermediate Nursing Process I 4.5 units
- NURS 154 - Intermediate Nursing Process and Mental Health 4 units
- NURS 146 - Health Assessment 2 units
- NURS 156 - Advanced Nursing Pharmacology 1 unit
- NURS 210 - Implications of Pathophysiology Concepts for Nurses 2 units
- NURS 250 - Intermediate Nursing Process and the Family 5.5 units
- NURS 251 - Legal and Ethical Considerations in Nursing 1 unit
- NURS 253 - Intermediate Nursing Process II 4.5 units
- NURS 254 - Advanced Nursing Process I 7 units
- NURS 255 - Advanced Nursing Process II - Clinical Preceptorship 2.5 units

Physical Education

- PE 260 - Basic Principles of Fitness and Weight Control 1 unit

Radiologic Technology

- RTEC A - Introduction to Radiologic Technology 3 units
- RTEC 111 - Fundamentals of Radiologic Technology 4 units
- RTEC 123 - Radiographic Positioning 1A 4 units

Respiratory Care

- RC 170 - Introduction to Respiratory Care Sciences and the Profession 2 units
- RC 172 - Fundamentals of Cardiopulmonary Physiology and Pharmacology in Respiratory Care 3 units
- RC 174 - Introduction to Respiratory Care Equipment and Patient Care Procedures 3 units
- RC 176 - Introduction to the Respiratory Care of the Non-Critically Ill Patient 6 units
- RC 178 - Respiratory Care of the Critically Ill Patient I 8 units
- RC 280 - Respiratory Care of the Critically Ill Patient II 9 units
- RC 282 - Fundamentals of Perinatal and Pediatric Respiratory Care 4 units
- RC 284 - Respiratory Care of the Critically Ill Patient III 9 units
- RC 286 - Fundamentals of Pulmonary Rehabilitation and Home Respiratory Care 3 units

Humanities Division

Chinese

- CHIN 1 - Elementary Chinese I 4 units
- CHIN 2 - Elementary Chinese II 4 units
- CHIN 3 - Intermediate Chinese I 4 units

French

- FREN 1 - Elementary French I 4 units
- FREN 2 - Elementary French II 4 units
- FREN 3 - Intermediate French I 4 units
- FREN 4 - Intermediate French II 4 units

German

- GERM 1 - Elementary German I 4 units
- GERM 2 - Elementary German II 4 units

Italian

- ITAL 1 - Elementary Italian I 4 units
- ITAL 2 - Elementary Italian II 4 units

Japanese

- JAPA 1 - Elementary Japanese I 4 units
- JAPA 2 - Elementary Japanese II 4 units
- JAPA 3 - Intermediate Japanese I 4 units
- JAPA 4 - Intermediate Japanese II 4 units

Spanish

- SPAN 1 - Elementary Spanish I 4 units
- SPAN 1H - Honors Elementary Spanish I 4 units
- SPAN 2 - Elementary Spanish II 4 units
- SPAN 3 - Intermediate Spanish I 4 units

Industry and Technology Division

Administration of Justice

- AJ 100 - Introduction to Administration of Justice 3 units
- AJ 103 - Concepts of Criminal Law I 3 units
- AJ 107 - Crime and Control - An Introduction to Corrections 3 units
- AJ 109 - Introduction to Police Patrol Procedures 3 units
- AJ 111 - Criminal Investigation 3 units
- AJ 115 - Community and Human Relations 3 units
- AJ 126 - Juvenile Delinquency and Legal Procedures 3 units
- AJ 130 - Criminal Procedures 3 units
- AJ 131 - Legal Aspects of Evidence 3 units
- AJ 170 - Constitutional Law for Criminal Justice 3 units

Air Conditioning and Refrigeration

- ACR 5 - Electrical Applications 4 units
- ACR 6 - Refrigeration and Air Conditioning Control Systems 4 units
- ACR 21 - Air Conditioning Fundamentals 4 units
- ACR 23 - Commercial Refrigeration Applications 4 units
- ACR 25 - Energy Efficient Residential, Commercial and Industrial Air Conditioning 4 units
- ACR 27 - Heating Technologies 4 units
- ACR 30 - Electric Controls 2 units

Architecture

- ARCH 100 - An Orientation to Architecture 1 unit
- ARCH 104 - History of Western Architecture 3 units
- ARCH 119 - Computer Aided Architectural Drafting 3 units
- ARCH 150A - Construction Documentation I 3 units
- ARCH 158 - Structures Analysis - Timber 3 units
- ARCH 170 - Architectural Graphics Techniques 3 units
- ARCH 172 - Architectural Color Rendering Techniques 3 units

Automotive Collision Repair/Painting

- ACRP 1A - Introduction to Automotive Collision Repair 8 units
- ACRP 1B - Collision Repair Equipment and Welding Techniques 8 units
- ACRP 1C - Major Collision Analysis and Repair 8 units
- ACRP 1D - Automotive Component Systems Analysis and Repair 8 units
- ACRP 2A - Basic Automotive Painting - Refinishing 8 units
- ACRP 2B - Automotive Refinishing Materials and Equipment 8 units
- ACRP 2C - Automotive Refinishing Applications 8 units
- ACRP 4A - Beginning Automotive Collision Repair I 4 units
- ACRP 4B - Beginning Automotive Collision Repair II 4 units
- ACRP 4C - Intermediate Automotive Collision Repair I 4 units
- ACRP 4D - Intermediate Automotive Collision Repair II 4 units
- ACRP 5A - Beginning Automotive Painting I 4 units
- ACRP 5B - Beginning Automotive Painting II 4 units
- ACRP 5C - Intermediate Automotive Refinishing I 4 units
- ACRP 5D - Intermediate Automotive Refinishing II 4 units
- ACRP 6 - Automotive Collision Repair for Non-Majors 2 units
- ACRP 20 - Automotive Collision Investigation 3 units
- ACRP 22 - Automotive Repair Fraud 3 units
- ACRP 24 - Automotive Collision Analysis 3 units
- ACRP 26 - Automotive Accident Reconstruction 3 units

Automotive Technology

- ATEC 1 - Introduction to Automotive Service 2 units
- ATEC 14 - Brakes 4 units
- ATEC 16 - Suspension and Four Wheel Alignment 4 units
- ATEC 21 - Introduction to Engine Performance 2 units
- ATEC 23 - Engine Performance, Electrical and Fuel Systems 4 units
- ATEC 24 - Computer Controlled Engine Management, Fuel Systems and Emissions 4 units
- ATEC 25 - Automotive Electrical Systems 4 units
- ATEC 43 - Introduction to Engine Repair 4 units
- ATEC 81 - Automotive Air Conditioning 3 units

Computer Aided Design/Drafting

- CADD 5 - Introduction to Mechanical Drafting 3 units
- CADD 7 - Solid Modeling, Assemblies and Two Dimensional (2D) Drawings 3 units
- CADD 28 - Parametric Three Dimensional (3D) Modeling and Assemblies 2 units
- CADD 31 - Orientation to CATIA 2 units
- CADD 32 - Product Modeling with CATIA 2 units
- CADD 33 - Analyses and Simulations with CATIA 2 units
- CADD 37 - Advanced CATIA Functions 2 units
- CADD 43 - Design Process and Concepts 4.5 units
- CADD 45 - Geometrical Dimensioning and Tolerancing 3 units

Electronics and Computer Hardware Technology

- ECHT 11 - Introduction to Electronics 3 units
- ECHT 110 - Introduction to Direct and Alternating Current Circuits 3 units
- ECHT 120 - Semiconductor Circuits I 3 units
- ECHT 122 - Semiconductor Power Devices 3 units
- ECHT 124 - Operational Amplifiers and Linear Integrated Circuits 3 units
- ECHT 130 - Digital Systems and Computer Logic I 3 units
- ECHT 191 - Introduction to Microprocessors and Interfacing 3 units

Engineering Technology

- ETEC 10 - Principles of Engineering Technology 3 units
- ETEC 12 - Introduction to Engineering Design 3 units
- ETEC 14 - Electronics for Engineering Technologists 3 units
- ETEC 15 - Aerospace Engineering 3 units
- ETEC 16 - Computer Integrated Manufacturing 3 units
- ETEC 18 - Engineering Design and Development 3 units

Fashion

- FASH 10 - Clothing Construction I 3 units
- FASH 11 - Clothing Construction II 3 units
- FASH 15 - Beginning Fashion Illustration 2 units
- FASH 20 - Textiles 3 units
- FASH 27 - Fashion Merchandising 3 units
- FASH 28 - Visual Merchandising 2 units
- FASH 31 - History of Costume 3 units
- FASH 35 - Applied Color Theory 2 units
- FASH 41 - Fashion Analysis and Selection 3 units

Fire and Emergency Technology

- FTEC 1 - Fire Protection Organization 3 units
- FTEC 2 - Fire Prevention Technology 3 units
- FTEC 3 - Fundamentals of Personal Fire Safety and Survival 3 units
- FTEC 4 - Fire Company Organization and Management 3 units
- FTEC 5 - Fire Behavior and Combustion 3 units
- FTEC 6 - Building Construction for Fire Protection 3 units
- FTEC 9 - Fire Apparatus and Equipment 3 units
- FTEC 10 - Hazardous Materials 3 units
- FTEC 11 - Arson Detection and Control 3 units
- FTEC 19 - Fire Service Entrance Preparation 3 units
- FTEC 20 - Fire Protection Equipment and Systems 3 units
- FTEC 144 - Emergency Medical Technician 6.5 units

Machine Tool Technology

- MTT 2 - Manufacturing Print Reading 3 units
- MTT 10A - Introduction to CAD/CAM 3 units
- MTT 16 - General Metals 3 units
- MTT 40 - Machine Shop Calculations 3 units
- MTT 46 - Basic Machine Tool Operation 3 units
- MTT 101 - Introduction to Conventional and CNC Machining 4 units

Manufacturing Technology

- MTEC 70 - Basic Robotics 2 units

Welding

- WELD 10A - Introduction to Shielded Metal Arc Welding (SMAW) 4 units
- WELD 10B - Intermediate Shielded Metal Arc Welding (SMAW) 4 units
- WELD 15 - Basic Welding for Allied Fields 3 units
- WELD 40A - Introduction to Gas Tungsten Arc Welding (GTAW) 3 units
- WELD 40B - Intermediate Gas Tungsten Arc Welding (GTAW) 3 units

Alternative Credit Options

Advanced Placement Tests

High school students who enroll in El Camino College may petition for college credit based on high school Advanced Placement (AP) courses. Credit will be given for the following courses if the student has taken the appropriate Advanced Placement Test and received a score of 3, 4 or 5. (No credit will be given for a score of 1 or 2.) The maximum number of units granted toward the associate degree will be 15.

Students who plan to transfer to a four-year university must check the institution's AP credit policies in their catalog or the institution's website, or consult an El Camino College academic counselor for unit and credit information for general education and major preparation.

Course credit and units granted at El Camino College may differ from course and unit credit granted by the transfer institution.

Art Examination (History of Art):

ART 102A (3 units)

ART 102B (3 units)

Biology Examination:

BIOL 10 (4 units)

Chemistry Examination:

CHEM 1A (5 units)

Note: The student must have a score of 4 or 5 and provide a laboratory portfolio to the Dean of Natural Sciences for evaluation for credit.

Computer Science Examination:

CSCI 3 (4 units) - Score 4 or 5 on Computer Science A Examination, or 3 or 4 on AB Examination

CSCI 1 and CSCI 2 (9 units) - Score of 5 on Computer Science AB Examination

Economics Examination (Macroeconomics):

ECON 1 (3 units)

Economics Examination (Microeconomics):

ECON 2 (3 units)

English Examination (Language and Composition):

ENGL 1A (4 units) - Score of 3 or 4

ENGL 1A and ENGL 1B (7 units) - Score of 5

English Examination (Literature and Composition):

ENGL 1A (4 units) or

ENGL 1B (3 units) - Score of 3 or 4

ENGL 1A and ENGL 1B (7 units) - Score of 5

Foreign Language Examination:

Two consecutive courses for a total of 8 units

Government and Politics Examination (American and California):

POLI 1 (3 units)

Government and Politics Examination (Comparative):

POLI 2 (3 units)

History Examination (American and World History):

HIST 101-HIST 102 (6 units)

HIST 140 (3 units)

Mathematics Examination:

MATH 150 (4 units) - Score of 4 or 5 on Statistics Examination

MATH 190 (5 units) - Score of 4 or 5 on Calculus AB Examination

MATH 190 (5 units) - Score of 3 on Calculus BC Examination

MATH 190 & MATH 191 (10 units) - Score of 4 or 5 on Calculus BC Examination

Note: Students who score a 3 or better on the Statistics AP exam, the Calculus AB exam, or the Calculus BC exam have met the math competency for the associate degree, IGETC (Area 2) and CSU General Education (Area B4) mathematics requirements.

Physics Examination:

PHYS 2A (4 units) - Score of 5 on Physics B Examination

PHYS 1A (4 units) - Score of 5 on Physics C Examination

Psychology Examination:

PSYC 5 (3 units)

For further information about and petitions for advanced placement tests, contact an evaluations specialist in the Admissions Office.

Acceptance of Credit

Credits earned at other colleges, which are accredited by one of the regional accrediting agencies are customarily accepted for transfer to El Camino College on receipt of an official transcript of record.

Students submitting transcripts from other colleges for the purpose of receiving a degree or certificate from El Camino College must submit an official college-to-college transcript. Transcripts delivered by students will not be considered for degree or certificate purposes.

Appropriate college-level United States Armed Forces courses also may be accepted for credit.

Credit for Military Service

The experience of the veteran will be reviewed and any appropriate credit granted. Once El Camino College reviews and awards credit, it will become part of the veteran's permanent record. Credit will be awarded after completion of one semester of attendance at El Camino College.

A copy of the veteran's separation document (form DD 214) or discharge paper (including the side showing dates of induction and separation) must be on file. No credit is approved for the six-month Reserve program. Credit for military service is given according to length of service as follows:

- 90 days to 1 year: CH 1 (3 units); Elective Credit (2 units)
- 1-2 years: CH 1 (3 units); Elective Credit (4 units)
- 2 years or more: Contemporary Health 1 (3 units); Elective Credit (6 units)

Note: Veterans enrolling in CH 1 will not be paid educational benefits for this course.

College Level Examination Program (CLEP) credit will be accepted when it is included on the American Council on Education (ACE) transcript.

High School Equivalents

Many courses and curricula offered at El Camino College are based on the supposition that the student has completed the specific high school courses generally included in the college preparatory program. If the student has not met the prerequisite to a course, the individual should complete the equivalent El Camino College course indicated here:

High School Course	El Camino College Course
Algebra, first year	MATH 40 or MATH 33 and MATH 43
Algebra, second year	MATH 73 or MATH 80
Geometry, one year	MATH 60
Trigonometry, one semester	MATH 170
Physics, one year	PHYS 11 and PHYS 12
Chemistry, one year	CHEM 4
Mechanical Drawing,	Computer Aided Design/one year CADD 5
Language, two years in one	First semester language

El Camino College Advanced Placement (AP) Credit

Advanced Placement (AP) Tests with scores of 3, 4, or 5 can be used to meet IGETC, CSU GE, Associate of Arts and Associate of Science General Education (GE), and/or Associate Degree major requirements.

Course credit and units granted at El Camino College may differ from course credit and units granted by a transfer institution.

Please check with the four-year transfer institution's AP credit policies in their catalog or on their website, or consult an El Camino College academic counselor for unit and course credit for major preparation.

AP Exam	ECC Associate Degree		CSU		UC	
Type of Exam	ECC GE Area	ECC Course Equivalent for Major Requirements	CSU GE	Units Earned Toward Transfer	IGETC	Units Earned Toward Transfer
Art History	Humanities 3 semester units	ART 102A, ART 102B 3 units	Area C1 or C2 3 semester units	6 semester units	Area 3A or 3B	8 quarter/5.3 semester units
Art (Studio)			N/A	3 semester units	N/A	8 quarter/5.3 semester units
Biology	Natural Sciences 4 semester units	BIOL 10 4 units	Area B2 and B3 4 semester units	6 semester units	Area 5B (with lab)	8 quarter/5.3 semester units
Calculus AB	Language and Rationality 3 semester units	MATH 190 - Score of 4 or 5 5 units Score of 3 meets AA/AS math competency requirement	Area B4 3 semester units	3 semester units*	Area 2A	4 quarter/2.7 semester units**
Calculus BC	Language and Rationality 3 semester units	MATH 190 Score of 3 5 semester units MATH 190 and MATH 191 Score of 4 or 5 9 semester units	Area B4 3 semester units	6 semester units*	Area 2A	8 quarter/5.3 semester units**
Calculus BC with AB subscore			Area B4 3 semester units	3 semester units		
AP CALCULUS EXAM LIMITATIONS				*Only one exam may be used toward transfer		**Maximum credit 8 quarter/5.3 semester units for both
Chemistry	Natural Sciences 4 semester units	CHEM 1A 5 semester units The student must have a score of 4 or 5 and provide a laboratory portfolio to the Dean of Natural Sciences for evaluation before credit is earned	Areas B1 and B3 4 semester units	6 semester units	Area 5A (with lab)	8 quarter/5.3 semester units
Chinese Language & Culture	Humanities 3 semester units	No course equivalency established; two consecutive semesters	Area C2 3 semester units	6 semester units	Area 3B and 6A	8 quarter/5.3 semester units
Computer Science A		CSCI 3 4 semester units The student must have a score of 4 or 5	N/A	3 semester units**	N/A	2 quarter/1.3 semester units***

AP CS EXAM LIMITATIONS				**Maximum One exam toward transfer		***Maximum credit 4 quarter/2.7 semester units for both CS exams
Economics - Macroeconomics	Social/Behavioral Sciences 3 semester units	ECON 1 3 semester units	Area D2 3 semester units	3 semester units	Area 4	4 quarter/2.7 semester units
Economics - Microeconomics	Social/Behavioral Sciences 3 semester units	ECON 2 3 semester units	Area D2 3 semester units	3 semester units	Area 4	4 quarter/2.7 semester units
English - Language & Composition	Language and Rationality 3 semester units	ENGL 1A Score of 3 or 4 4 semester units ENGL 1A and ENGL 1B Score of 5 7 semester units	Area A2 3 semester units	6 semester units	Area 1A	8 quarter/5.3 semester units*
English - Literature & Composition	Language and Rationality or Humanities 3 semester units	ENGL 1A 4 semester units or ENGL 1B 3 units Score of 3 or 4 ENGL 1A and ENGL 1B Score of 5 7 units	Area A2 and C2 6 semester units	6 semester units	Area 1A or 3B	8 quarter/5.3 semester units*
AP ENGLISH EXAM LIMITATIONS						*8 quarter/5.3 semester units maximum for both exams
Environmental Science	Natural Sciences 3 semester units	GEOG 1 or GEOL 1	Area B2 and B3 (if taken prior to Fall 2009) or Area B1 and B3 (regardless of when taken) 4 semester units	4 semester units	Area 5A (with lab)	4 quarter/2.7 semester units
French Language & Culture	Humanities 3 semester units	No course equivalency established; two consecutive semesters	Area C2 3 semester units	6 semester units	Area 3B and 6A	8 quarter/5.3 semester units
French Literature	Humanities 3 semester units	No course equivalency established; two consecutive semesters	Area C2 3 semester units (if taken prior to Fall 2009)	6 semester units	Area 3B and 6A	8 quarter/5.3 semester units
German Language & Culture	Humanities 3 semester units	No course equivalency established; two consecutive semesters	Area C2 3 semester units	6 semester units	Area 3B and 6A	8 quarter/5.3 semester units
Government & Politics - Comparative	Social/Behavioral Sciences 3 semester units	POLI 2 3 semester units	Area D 3 semester units	3 semester units	Area 4	4 quarter/2.7 semester units
Government and Politics - U.S.	Social/Behavioral Sciences 3 semester units	POLI 1 3 semester units	Area D and US 2* 3 semester units	3 semester units	Area 4	4 quarter/2.7 semester units
AP GOVERNMENT EXAM LIMITATIONS			*Does not fulfill AHI California Government requirement	Student can satisfy the AHI requirement after transfer		
History - European	Social/Behavioral Sciences or Humanities 3 semester units	HIST 141 3 semester units	Area C2 or D 3 semester units	6 semester units	Area 3B or 4	8 quarter/5.3 semester units
History - U.S.	Social/Behavioral Sciences or Humanities 3 semester units	HIST 101 HIST 102 6 semester units	Area C2 or D 3 semester units	6 semester units	Area 3B or 4F	8 quarter/5.3 semester units
History - World	Social/Behavioral Sciences or Humanities 3 semester units	HIST 140 3 semester units	Area C2 or D6 3 semester units	6 semester units	Area 3B or 4	8 quarter/5.3 semester units
Human Geography	Social/Behavioral Sciences 3 semester units	No course equivalency established	Area D5 3 semester units	3 semester units	Area 4E	4 quarter/2.7 semester units
Italian Language & Culture	Humanities 3 semester units	No course equivalency established; two consecutive semesters	Area C2 3 semester units	6 semester units	Area 3B and 6A	8 quarter/5.3 semester units

					3 semester units	
Japanese Language & Culture	Humanities 3 semester units	No course equivalency established; two consecutive semesters	Area C2 3 semester units	6 semester units	Area 3B and 6A	8 quarter/5.3 semester units
Latin - Vergil	Humanities 3 semester units	No course equivalency	Area C2 3 semester units	3 semester units	Area 3B and 6A	4 quarter/2.7 semester units
Latin - Literature	Humanities 3 semester units	No course equivalency	Area C2 3 semester units (if taken prior to Fall 2009)	6 semester units	Area 3B and 6A	4 quarter/2.7 semester units
Music Theory		No course equivalency established			N/A	8 quarter/5.3 semester units
Physics B	Natural Sciences 4 semester units	PHYS 2A Score of 5 3 semester units	B1 and B3 4 semester units*	4 semester units*	Area 5A (with lab)	8 quarter/5.3 semester units**
Physics C - Electricity/ Mechanics	Natural Sciences 3 semester units	PHYS 1A Score of 5 4 semester units	Area B1 and B3 4 semester units*	4 semester units*	Area 5A (with lab)	4 quarter/2.7 semester units**
Physics C - Electricity/ Magnetism	Natural Sciences 3 semester units	PHYS 1A Score of 5 4 semester units	Area B1 and B3 4 semester units*	4 semester units*	Area 5A (with lab)	4 quarter/2.7 semester units**
AP PHYSICS EXAM LIMITATIONS				*Maximum 4 semester units toward GE and 6 semester units toward transfer		**Maximum 8 quarter/5.3 semester units for both exams
Psychology	Social/Behavioral Sciences 3 semester units	PSYC 5 3 semester units	Area D9 3 semester units	3 semester units	Area 4I	4 quarter/2.7 semester units
Spanish Language	Humanities 3 semester units	No course equivalency established; two consecutive semesters	Area C2 3 semester units	6 semester units	Area 3B and 6A	8 quarter/5.3 semester units
Spanish Literature	Humanities 3 semester units	No course equivalency established; two consecutive semesters	Area C2 3 semester units	6 semester units	Area 3B and 6A	8 quarter/5.3 semester units
Statistics	Language and Rationality 3 semester units	MATH 150 Score of 4 or 5 4 semester units Score of 3 meets AA/AS math competency requirement	Area B4 3 semester units	3 semester units	Area 2	4 quarter/2.7 semester units

AA/AS: Students with a score of 3 or better may use the AP exam for general education credit in the appropriate area; however, credit for a specific course to meet major requirements for the AA or AS degree, will need to follow the course equivalent outlined by the academic department. A student who receives AP credit and then takes the equivalent ECC course will have the unit credit for such duplication deducted prior to being awarded the AA/AS degree. Credit by Advanced Placement exam is noted and listed on a student's transcript, with units assigned and no grade. A maximum of 15 units of AP credit can be applied to the associate degree.

CSU GE: The Advanced Placement examinations may be incorporated into the certification of CSU General Education-Breath requirements by any certifying institution. All CSU campuses will accept the minimum units shown and apply them toward fulfillment of the designated General Education-Breath area if the examination is included as part of a full or subject-area certification. Please note that individual CSU campuses may choose to grant more units than those specified toward completion of General Education- Breath and major requirements.

IGETC: AP exams must be used in area indicated regardless of where the certifying CCC's discipline is located.

TRANSFER: Students may use AP exams for transfer units and major requirements; however, the student must consult with a counselor and the four year institution's college catalog or AP credit policies. Course credit varies by campus.

Honors Program

Alpha Gamma Sigma

Alpha Gamma Sigma (AGS), the Honor and Scholarship Society, is a California Community Colleges statewide organization founded to foster, promote, maintain, and recognize scholastic achievement and service among community college students. The Alpha Phi chapter of AGS at El Camino College attracts many students of all majors desiring academic excellence.

A student may attain initial membership by having completed 12 semester units from a recognized institution of higher education with a GPA of 3.0 or above. Students joining directly out of high school are asked to have a minimum GPA of 3.5 at the high school level.

Because AGS is also a club and one of the largest organizations on campus, there are many opportunities for college and community involvement. Students can gain leadership experience for their scholastic resumes by becoming a member of the organization's cabinet and planning committees. There are ways for everyone to get involved and learn organizational skills that can be helpful in school and in life.

Permanent (lifetime) members of Alpha Gamma Sigma receive a notation on their transcripts, a gold seal on their diplomas, and wear gold stoles during the commencement ceremonies. Permanent Member status may be achieved by completing 60 units (30 completed at El Camino College) with a 3.5 GPA and regular membership for at least one semester or by having a 3.25 GPA and regular membership for at least two semesters.

Membership applications are accepted during the first six weeks of each semester and are available online, in the Student Activities Center, at the AGS information table during club rush week, and at AGS general meetings. For more information and applications, please visit: www.elcamino.edu/student-services/activities/clubs/ags.asp.

Dean's List

To qualify for the Dean's List, a student must, in any one semester, complete 12 or more units with a grade point average of 3.5 or higher. For further information, contact the office of the Vice President, Academic Affairs.

Honors Transfer Program

The El Camino College Honors Transfer Program is designed to better prepare the highly motivated student to transfer to a university. The program provides a unique learning environment that stresses scholastic excellence and develops the academic awareness necessary to achieve this goal.

The major objective of the program is to prepare students for transfer by focusing on enhanced writing, reading and study skills.

The Honors Transfer Program office is located in the Student Services Center, inside the Counseling Division.

Honors Admission Requirements

A student must:

1. Have a minimum 3.1 cumulative GPA from high school or, if already in college, from at least nine transferable units;
2. Be eligible for or have completed English 1A; and
3. Complete an Honors Transfer Program application and submit all required materials.

Completion Requirements

A student must:

1. Maintain a minimum 3.1 cumulative GPA in all courses.
2. Complete a minimum of two semesters in the Honors Transfer Program at El Camino College.
3. Complete a minimum of five honors courses, including at least one honors course each semester until five honors courses are completed. English 1A must be taken (unless already completed) during the first semester in the program.
4. Attend four honors enrichment seminars while in the program.
5. Complete two scheduled half-hour (Educational Plan) counseling appointments.

Honors Transfer Agreements

Students who complete the El Camino College Honors Transfer Program may take advantage of transfer agreements with a number of colleges and universities. These transfer agreements may include priority admission, scholarship opportunities, admission to the university honors programs, library privileges and housing priority.

Honors Transfer Program Benefits

Benefits include:

1. Priority registration for all El Camino College classes.
2. Close academic and social interaction with other highly motivated honors students.
3. Enrollment in honors classes with smaller class size and taught by selected faculty.
4. Designation of Honors Transfer Program on El Camino College transcripts and on El Camino College associate degrees.
5. A parchment-quality Award of Achievement upon program completion.
6. An honors program director, secretary, and transfer counselors for special help and advisement.
7. Enrichment seminars that provide information leading to academic and personal growth.
8. Increased chances of receiving scholarships.
9. Special privileges offered by universities with which El Camino College has an honors transfer agreement.

Honors Curriculum

Honors courses are academically enriched to intellectually stimulate students, encourage independent, critical thinking and promote close interaction between students and faculty.

Honors courses are chosen to fulfill the requirements of the associate degree as well as to transfer to UC, CSU and most other universities. Thus, students in the Honors Transfer Program generally complete the same number of courses as other students planning to transfer. Honors sections are currently offered for the following courses:

ART 102AH - Honors History of Western Art - Prehistoric to Gothic

ART 208H - Honors History of American Art

ASTR 20H - Honors The Solar System

ASTR 25H - Honors Stars and Galaxies

BIOL 10H - Honors Fundamentals of Biology

BIOL 101H - Honors Principles of Biology I

BIOL 102H - Honors Principles of Biology II

BUS 1A - Financial Accounting

CHEM 1A - General Chemistry I

CHEM 4H - Honors Beginning Chemistry

COMS 100 - Public Speaking

COMS 120 - Argumentation and Debate

COMS 130 - Interpersonal Communication

CH 1 - Personal and Community Health Issues

ECON 1H - Honors Principles of Economics: Macroeconomics

ENGL 1AH - Honors Reading and Composition

ENGL 1BH - Honors Literature and Composition

ENGL 1CH - Honors Critical Thinking and Composition

GEOG 5 - World Regional Geography

HIST 101H - Honors United States History to 1877

HIST 102H - Honors United States History from 1877 to the Present

HIST 122H - Honors United States Social History: Cultural Pluralism in America

MUSI 112H - Honors Music Cultures of the World

OCEA 10H - Honors Introduction to Oceanography

PHIL 101H - Honors Introduction to Philosophy

PHIL 105H - Honors Critical Thinking and Discourse

PHIL 120 - Ethics, Law and Society

POLI 1H - Honors Governments of the United States and California

POLI 10H - Honors Introduction to International Relations

PSYC 3H - Honors Critical Thinking and Psychology

PSYC 5H - Honors General Psychology

SOCI 101H - Honors Introduction to Sociology

SPAN 1H - Honors Elementary Spanish I

Other College Programs

Cooperative Work Experience Education (Work Experience and Internship Credit)

Cooperative Work Experience Education (CWEE) is a course designed for students who are cross-training at their current worksite for upward mobility or possible career changes, as well as those looking for entry-level occupational training through workbased learning experiences and internships. CWEE uses the entire community as the laboratory, allowing students to apply theoretical information learned in the classroom to practical problems at work. It enables students to compare their personal goals and expectations with specific career requirements and to learn from professionals and technical experts working in their career field.

Interested students must be employed or volunteering in a job directly related to their major/career goal and concurrently enrolled or have completed a class in that major. Employers must be willing to let students engage in new learning experiences at work and be willing to assist CWEE instructors in the preparation of learning objectives/evaluations. CWEE students must enroll in a minimum of seven units (including CWEE). Students not enrolled in seven units should contact the appropriate Academic Affairs Division Office.

Credit is awarded on the basis of objectives completed and the number of hours worked. The student needs a minimum of 150 hours of paid work or 120 hours of volunteer work for each semester enrolled in CWEE. Up to 16 units may be used for elective credit for an AA/AS degree and eight units will transfer to CSU.

The following scale reflects the equivalent units for hours worked:

2 units = 10 hours worked per week

3 units = 15 hours worked per week

4 units = 20 hours worked per week

How to Enroll:

1. To register for the appropriate CWEE section students must first fill out a CWEE application and contact the CWEE instructor by the second week of the semester. (CWEE sections are located in the Schedule of Classes.)
2. Complete an Application for Cooperative Work Experience Education available in the Division Offices.
3. Purchase a Cooperative Work Experience Education Student Handbook from the Student Bookstore. Read the Handbook and complete the Learning Objectives agreement.

4. Meet with your CWEE instructor before the end of the second week to discuss the course requirements. Instructors are available through the appropriate Division Offices.

Cooperative Work Experience Education is offered in the following areas:

Behavioral and Social Sciences: Available in the area of childhood education.

Business: Available in the area of paralegal studies.

Fine Arts: Available in the areas of art, dance, film/ video, music, and theatre.

Health Sciences and Athletics: Available in the area of nursing.

Humanities: Available in the area of journalism.

Industry and Technology: Available in the areas of administration of justice, air conditioning and refrigeration, architecture, automotive collision repair/painting, automotive technology, computer aided design/drafting, construction technology, cosmetology, electronics and computer hardware technology, environmental technology, fashion, fire and emergency technology, machine tool technology, and welding.

Natural Sciences: Available in the area of environmental horticulture.

Distance Education

Many courses offered on the El Camino College campus may be taken through the Distance Education program. Online courses via computer and the web are offered. Distance Education courses are ideal for students who need a flexible class schedule because most of the coursework may be completed off campus. In addition to online courses, we also offer hybrid courses. Hybrid courses require weekly on-campus class sessions along with computer coursework.

Students may register for Distance Education courses during registration via www.elcamino.edu. For further information, visit the Distance Education Office located in the Schauerman Library, East Wing, Lower Level, Room 76, call 310-660-6453, or visit www.elcamino.edu/DistanceEd. Office hours during the fall and spring semesters are Monday through Friday, 8:00 a.m. to 4:30 p.m. During the summer session, the office is closed on Friday.

Please refer to Administrative Procedure 4105 for Distance Education on the El Camino website www.elcamino.edu/administration/board/policies.asp.

Independent Study

Board Policy 4101

It is the policy of El Camino College to provide enhanced educational opportunities for students wishing to explore a subject area more fully by establishing an Independent Study program. Under the guidance of a supervising instructor qualified to teach in the specific subject area, students in Independent Study courses will complete projects that reflect scholarly or creative efforts of an advanced nature that go beyond the scope of a regular course. Independent Study is not designed for students who have already obtained a degree in the discipline in which the Independent Study Course is being attempted.

Procedures for implementing this policy will be developed in collegial consultation with the Academic Senate.

Independent Study Administrative Procedures 4101

Students may review the Administrative Procedure for Board Policy 4101 on the El Camino College website www.elcamino.edu/administration/board/policies.asp.

Graduation Requirements

Associate Degree

Definition of Associate Degree

The associate degree leads students through patterns of learning experiences designed to develop certain capabilities and insights. Among these are the ability to think critically and to communicate clearly and effectively both orally and in writing; to use mathematics; to understand the modes of inquiry of the major disciplines; to be aware of other cultures and times; to achieve insights gained through experience in thinking about ethical problems; to find, evaluate, use, and communicate information in various formats; and to develop the capacity for self-understanding. In addition to these accomplishments, the student shall possess sufficient depth in some field of knowledge to contribute to lifetime interest.

An Associate of Arts degree is granted in a discipline in which behavioral sciences, fine arts, human movement, humanities, public affairs, or social sciences are integral within the academic area.

An Associate of Science degree is granted in a discipline in which scientific thought and investigation are integral within the academic area or where there is emphasis on the application of mathematics, science, or technology.

Philosophy for Associate Degree and General Education

Board Policy 4025

El Camino College recognizes the importance of educating individuals who will serve the local, state, national, and international communities. The associate degree requirements lead students through a general education pattern designed to encourage the development of broad knowledge in core subjects and the acquisition of sufficient depth in a specific field of knowledge.

The awarding of an associate degree is intended to represent more than an accumulation of units. It recognizes a successful attempt on the part of the College to lead students through patterns of learning experiences designed to develop certain capabilities and insights. Among these are the following:

- to think and to communicate clearly and effectively both orally and in writing
- to use mathematics
- to understand the modes of inquiry of the major disciplines
- to be aware of other cultures and times
- to achieve insights gained through experience in thinking about ethical problems
- to develop the capacity for self-understanding
- to engage in lifelong learning

In addition to these accomplishments, the student shall possess sufficient depth in some field of knowledge to contribute to lifetime interest. Each associate degree offered by the College shall contain a pattern of general education and major courses selected to assure the collection of experiences, capabilities, and insights.

Central to an associate degree, general education is designed to introduce students to the variety of means through which people comprehend the modern world. It reflects the conviction of Colleges that those who receive their degrees must possess in common certain basic principles, concepts, and methodologies both unique and shared by the various disciplines. College-educated individuals must be able to use this knowledge when evaluating and appreciating the physical environment, the culture, and the society in which they live. Most importantly, general education should lead to better self-understanding. Courses approved for inclusion in the general education requirements shall be evaluated as meeting this philosophy.

The Superintendent/President shall, in consultation with the Academic Senate, develop and submit to the Board for approval procedures to assure that courses used to fulfill general education and associate degree requirements meet the standards used in this policy.

General Education Criteria for Associate of Arts and Associate of Science Degrees

1. Natural Sciences

Courses in the natural sciences are those which examine the physical universe, its life forms, and its natural phenomena. To satisfy the general education requirement in natural sciences, a course shall be designed to help the student develop an appreciation and understanding of the scientific method and encourage an understanding of the relationships between science and other human activities.

This category would include introductory or integrative courses in astronomy, biology, chemistry, general physical science, geology, meteorology, oceanography, physical geography, physical anthropology, physics, and other scientific disciplines that emphasize experimental methodology, the testing of hypotheses, and the power of systematic questioning, rather than only the recall of facts. Courses which focus on personal, practical, or applied aspects are not suitable for this category.

2. Social and Behavioral Sciences

Courses in the social and behavioral sciences promote an appreciation and understanding of how members of diverse societies operate or have operated as individuals and social groups. To satisfy the general education requirement in social and behavioral sciences, a course shall develop an awareness of methods of inquiry and stimulate critical thinking about the ways in which people act and interact within social and cultural contexts.

This category would include introductory or integrative survey courses such as child development, cultural anthropology, cultural geography, economics, family and consumer studies, history, political science, psychology, sociology, and related disciplines.

3. Humanities

Courses in the humanities are those that promote an appreciation of the cultural activities and artistic expressions of human beings. To satisfy the general education requirement in humanities, a course shall develop the student's awareness of the ways that people throughout the ages have artistically and culturally responded to themselves and the world around them and shall develop the student's aesthetic understanding and ability to make value judgments.

This category would include introductory or integrative courses in the arts, foreign languages, literature, philosophy, and religion.

4. Language and Rationality

Courses in language and rationality are those that develop for the student the principles and applications of language toward logical thought, clear and precise expression, and critical evaluation.

1. English Composition

Courses that fulfill the written composition requirement shall focus primarily on both expository and argumentative writing.

2. Communication and Analytical Thinking

Courses that fulfill the communication and analytical thinking requirement shall include oral communications, written communications, critical reasoning, mathematics, logic, statistics, and computer languages and programming.

5. Health and Physical Education

Courses in health and physical education promote lifelong understanding of the basic human need for development and maintenance of good personal health and fitness. To satisfy the general education requirement in health education, a course shall help the student develop knowledge of personal health through the examination of health-related social problems, potential preventative strategies, and mediating actions. A physical education course shall establish a foundation for regular life-long physical activity and provide opportunities for a student to develop competencies in activities that promote movement, reduce disease risk, and improve overall quality of life.

6. Mathematics Competency

A course satisfies the Mathematics Competency requirement if it integrates numeric, symbolic, functional, and spatial reasoning concepts, and enables students to apply their knowledge of mathematics to solve mathematical problems and to judge the reasonableness of their results in meaningful and authentic applications. A course satisfying the Mathematics Competency must have the same rigor and be at or above the level of difficulty of intermediate algebra.

Associate Degrees for Transfer

California Community Colleges offer associate degrees for transfer to the CSU. These may include Associate of Arts (AA-T) or Associate of Science (AS-T) transfer degrees. These degrees are designed to provide a clear pathway to a CSU major and baccalaureate degree. California Community College students who are awarded an AA-T or AS-T degree are given priority admission consideration to a CSU campus or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or campuses. If the AA-T or AS-T is deemed a similar degree by the CSU, students will be able to complete their remaining units for the bachelor's degree within 60 units.

Graduation

To receive an Associate of Arts or an Associate of Science degree from El Camino College, a student must complete at least 60 units in degree applicable college courses, which must include general education requirements and course work in an approved transfer major or associate degree program. Course work toward the degree must be completed with a cumulative grade point average (GPA) of 2.0 or higher at El Camino College and in work completed at all colleges. Students must also complete at least 12 semester units of study in residence within requirements for either the general education and/or major. A notation of "Graduation with Honors" is earned with a cumulative GPA of 3.5 or higher.

Students must file an Intent to Graduate Form in the evaluations area, located in the Admissions Office, by the deadline date published in the schedule of classes.

Evaluation of Completion of Requirements

Students who want to graduate from El Camino College with an Associate of Arts or Associate of Science degree must file an Intent to Graduate form, which is evaluated according to the following conditions:

1. Catalog requirement - Degree requirements are derived from the catalog in effect at the time the student entered El Camino College or from the current catalog, following the Catalog Rights guidelines (described below). Each catalog is in effect during the academic year for which it was published (fall semester through the summer session).
2. Residency requirement - Students must complete at least 12 semester units of study in residence within requirements for either the general education and/or major at El Camino College.
3. Unit requirement - Sixty (60) degree applicable units are required for the associate degree, including appropriate general education and major requirements.
4. General Education requirement - Coursework toward the degree must be completed with a cumulative grade point average (GPA) of 2.0 or higher in work at El Camino College and in work completed at all colleges.
5. English requirement - A minimum grade of "C" in a freshman composition course.
6. Mathematics Competency requirement - A minimum grade of "C" is required in this area.
7. Major requirement - A minimum grade of "C" in all courses toward the major.

Catalog Rights

Board Policy 4100.1

The El Camino College Catalog specifies the general education, major, and unit requirements that the student must satisfy to qualify for an Associate Degree, a Certificate of Achievement, or a Certificate of Accomplishment. Students who have maintained continuous enrollment may choose to graduate under the catalog requirements in effect either 1) at the time they began attending El Camino College continuously or 2) at the time they graduate from El Camino College. For degree and certificate purposes, continuous enrollment is defined as enrolling at El Camino College at least one semester (excluding summer terms) each academic year and receiving a letter grade, a "W," CR/NC (Credit/No Credit), or Pass/No Pass on the transcript.

Double Major

Students may receive a double major upon completion of the major requirements for the second major.

Second Degree

Students may receive both an Associate of Arts and an Associate of Science Degree upon the completion of the specific general education and major requirements for each degree as stated in the catalog. Students qualifying for more than one AA or AS degree will have all degrees posted on their transcripts; however, they will only receive one diploma for an achieved AA degree and one diploma for an achieved AS degree. (References: Sections 55002(a) and 55060 et seq.; Board Policies 4100.1 and 4235.

General Information

Some courses listed in the associate degree requirements may not transfer to a four-year college or university. Please refer to the course notations. All degrees require a total of 60 units with no fewer than 18 units in the major and appropriate general education courses as indicated on the Associate of Arts or Associate of Science degree patterns that follow.

Certificates of Achievement and Accomplishment

El Camino College offers a variety of certificate programs. A Certificate of Achievement is recorded on a student's transcript. A Certificate of Accomplishment is not recorded on the transcript. Each of the programs requires completion of courses in a particular field. Unlike degree programs, courses outside the field are not generally required. Students must file a petition for a certificate in the evaluations area, which is located in the Admissions Office, by the deadline date published in the schedule of classes.

A Certificate of Achievement is awarded to students who complete the prescribed program with a 2.0 grade point average.

A Certificate of Achievement with Honors is awarded to students who complete the prescribed program with a 3.0 grade point average.

A Certificate of Achievement with High Honors is awarded to students who complete the prescribed program with a 3.5 grade point average or above.

A Certificate of Accomplishment is awarded to students who complete the prescribed program with a 2.0 grade point average or above.

Certificates of Achievement

Administration of Justice:

Administration of Justice
Forensics

Air Conditioning and Refrigeration:

Air Conditioning
Air Conditioning and Refrigeration Electric Controls
Heating, Ventilation, and Air Conditioning (HVAC) and Refrigeration
Refrigeration

Architecture:

Architecture

Art:

Digital Arts
Gallery Management
Jewelry Design and Fabrication
Visual Communications

Automotive Collision Repair/Painting:

Automotive Collision Repair/Painting I
Automotive Painting and Refinishing

Automotive Technology:

Automotive Brakes/Suspension Transmission/Drive Train Technician
Automotive Engine Rebuilding/Repair Technician
Automotive Technician I
Automotive Technician II
Automotive Tune-Up Technician

Business:

Accounting
Business Management
Marketing
Office Administration: Office Applications Specialist
Retail Management

Child Development:

Early Childhood Education
Early Intervention Assistant
Special Education Assistant

Computer Aided Design/Drafting:

Computer Aided Design/Drafting

Computer Information Systems:

Business Programming
Computer Systems Applications
Database Management

Computer Science:

Computer Science

Construction Technology:

Construction Technology
Cabinet and Fine Woodworking

Cosmetology Level II:

Cosmetology Level II

Electronics and Computer Hardware Technology:

Computer Hardware Electronics Technician
Electronics Engineering Technician

Engineering Technology:

Engineering Technology
Engineering Technician

Environmental Horticulture:

Environmental Horticulture

Fashion:

Fashion Design and Production
Fashion Merchandising
Fashion Stylist

Film/Video:

Film/Video Production

Fire and Emergency Technology:

Fire and Emergency Technology
Fire Academy
Paramedical Technician

Journalism:

Journalism

Machine Tool Technology:

CNC Machine Operator
Machinist
Numerical Control Programmer

Manufacturing Technology:

Manufacturing Technology

Music:

Commercial Music

Paralegal Studies:

Paralegal Studies

Photography:

Photography

Real Estate:

Mortgage Loan Brokerage
Real Estate
Real Estate Appraisal

Respiratory Care:

Respiratory Care

Sign Language/Interpreter Training:

Sign Language/Interpreter Training

Transfer Studies:

CSU General Education Breadth
Intersegmental General Education Transfer Curriculum (IGETC)

Welding:

Welding

Certificates of Accomplishment

Administration of Justice:

Homeland Security Essentials

Air Conditioning and Refrigeration:

Automation Fundamentals
HVACR Electrical Fundamentals
HVACR Fundamentals
Heating Technologies
Refrigeration Fundamentals

Automotive Collision Repair/Painting:

Automotive Accident Reconstruction
Automotive Collision Investigation
Damage Estimating

Automotive Technology:

Automotive Air Conditioning Technician
Automotive Brakes and Suspension Technician
Automotive Engine Rebuilding and Repair Technician

Automotive Engine Management
Automotive Transmission and Drive Train Technician

Computer Aided Design/Drafting:

AutoCAD Mechanical Drafting Trainee

Computer Information Systems:

Cloud Computing with Amazon Web Services

Construction Technology:

Cabinet and Millwork
Euro Hardware
Furniture Design and Fabrication
Residential Construction Trainee
Residential Electrical Trainee
Residential Plumbing Trainee
Residential Remodeling Trainee

Cosmetology:

Cosmetology Level I

Creative Writing:

Creative Writing

Electronics and Computer Hardware Technology:

CompTIA Computer Hardware Technician
Computer Hardware Technician
Electronics Technician
Robotics

Engineering Technology:

Electrical and Electronics Engineering Technician
Mechanical Engineering Design Technician

English as a Second Language:

English as a Second Language

Environmental Technology:

Environmental Technology

Fire and Emergency Technology:

Fire Explorer

Physical Education:

Fitness Trainer

Radiologic Technology:

Radiologic Technology

Recreation:

Recreation Leadership

Welding:

Gas Tungsten Arc Welding (GTAW) Ferrous and Non-Ferrous Metals
Semi-Automatic Welding
Shielded Metal Arc Welding (SMAW) Structural Steel
Structural Steel Fabrication

Evaluation of Completion of Requirements

The Certificate of Achievement or the Certificate of Accomplishment will be evaluated according to the following conditions:

1. Catalog requirements: Certificate requirements are derived from the catalog in effect at the time the student entered El Camino College or from the current catalog, following the Catalog Rights guidelines. (Please refer to Associate Degree.) Each catalog is in effect during the academic year for which it is published (fall semester through the summer session).
2. Residency requirement: Individual certificates specifically state the required number of units that must be completed at El Camino College.

General Education Transfer Patterns

Preparation for Transfer

Students who intend to transfer to a four-year college or university must complete minimum admission requirements at the community college prior to transferring. Requirements vary among institutions. Therefore, students should become familiar with the courses for 1) general education, 2) major preparation, 3) admission requirements to meet minimum eligibility and selective majors, and 4) Grade Point Average (GPA).

Admission requirements may change from year to year. It is to the student's advantage to select a transfer institution as early as possible and meet with an academic counselor, transfer center adviser, the university representative, and/or articulation officer for updated information. Students are encouraged to view the ASSIST website at www.assist.org, which provides the most up-to-date information on course articulation for California public universities.

In addition, students are welcome to visit the Transfer Center in the Student Services Center building. The Transfer Center offers a variety of services to assist students with the transfer process such as workshops, university fairs, campus tours, application assistance, and university contacts.

ASSIST (Articulation System Stimulating Interinstitutional Student Transfer)

ASSIST is a computerized student-transfer information system that can be accessed online. It displays reports of how course credits earned at one California Community College can be applied at the receiving institution. ASSIST is the official repository of articulation for California's public colleges and universities and therefore features the most accurate and up-to-date information available about student transfer in California. For additional information regarding ASSIST, visit the Career and Transfer Center or the ASSIST website at www.assist.org.

California State University

The California State University system consists of 23 campuses located throughout the state. While each campus within the system has its own unique geographic and academic character, all campuses offer bachelor's and master's degrees in a variety of subject areas.

Upper Division Transfer Requirements:

Students who have at least 60 transferable semester units (or 90 transferable quarter units) with a 2.0 grade point average completed by the time of entry to a CSU, are considered an upper division applicant. Applicants are eligible for admission to the CSU if they:

1. are in good standing at the last college or university attended; and
2. have completed 30 units of general education to include: one course in written communication, one course in oral communication, one course in critical thinking, and one transferable course in mathematics above intermediate algebra. The four courses must be completed with a grade of C or better.

Campuses that are impacted have supplemental admission criteria. Students should meet with a counselor and visit: www.calstate.edu/SAS/ for additional information.

Note: The majority of students transfer as upper division transfers, as most CSU campuses do not accept lower division transfer students. Please check with the individual campus for verification.

CSU General Education Breadth Requirements

General Education Breadth Requirements are designed so that students may take lower division general education courses at a California community college such that when a student transfers, the student will have completed most, if not all, of the lower division general education requirements.

Certification

Certification means that El Camino College has verified that the student has completed the lower division general education requirements for the CSU. For full certification, students must complete 39 units from Categories A through E of the CSU General Education Requirements. Twelve of the 39 units must be completed at El Camino College. CSU certification may be requested in Admissions. Courses may be listed in multiple categories, but can only be certified in one area.

CSU General Education Requirements

Area A - Communication in the English Language and Critical Thinking

minimum 9 semester units or 12 quarter units

One course from each subsection.

1. Communication Studies

- COMS 100 - Public Speaking 3 units
- COMS 120 - Argumentation and Debate 3 units
- COMS 130 - Interpersonal Communication 3 units
- COMS 140 - Small Group Communication 3 units

2. English

- ENGL 1A - Reading and Composition 4 units
- ENGL 1AH - Honors Reading and Composition 4 units

3. English

- ENGL 1C - Critical Thinking and Composition 3 units
- ENGL 1CH - Honors Critical Thinking and Composition 3 units
- PHIL 105 - Critical Thinking and Discourse 3 units
- PHIL 106 - Introduction to Symbolic Logic 3 units
- PSYC 3 - Critical Thinking and Psychology 3 units
- COMS 120 - Argumentation and Debate 3 units

Area B - Physical Universe and its Life Forms

minimum 9 semester units or 12 quarter units

One course must be completed from each subsection; one course must include a laboratory (marked by *).

1. Physical Sciences:

- ASTR 12 - Astronomy Laboratory 1 unit *

- ASTR 20 - The Solar System 3 units
- ASTR 25 - Stars and Galaxies 3 units
- ASTR 25H - Honors Stars and Galaxies 3 units
- CHEM 1A - General Chemistry I 5 units *
- CHEM 1B - General Chemistry II 5 units *
- CHEM 4 - Beginning Chemistry 5 units *
- CHEM 4H - Honors Beginning Chemistry 5 units
- CHEM 7A - Organic Chemistry I 5 units *
- CHEM 7B - Organic Chemistry II 5 units *
- CHEM 20 - Fundamentals of Chemistry 5 units *
- CHEM 21A - Survey of General and Organic Chemistry 4 units *
- CHEM 21B - Survey of Organic and Biochemistry 4 units *
- GEOG 1 - Physical Geography 3 units
- GEOG 6 - Physical Geography Laboratory 1 unit *
- GEOG 9 - Weather and Climate 3 units
- GEOL 1 - Physical Geology 3 units
- GEOL 2 - History of Planet Earth 3 units
- GEOL 3 - Physical Geology Laboratory 1 unit *
- GEOL 4 - History of Planet Earth Laboratory 1 unit *
- GEOL 6 - Earth Science in Education 4 units *
- GEOL 15 - Natural Disasters 3 units
- GEOL 30 - Geology Laboratory of Death Valley 1 unit *
- GEOL 32 - Geology Laboratory of Owens Valley and Sierra Nevada 1 unit *
- GEOL 34 - Geology Laboratory of Southeastern California 1 unit *
- GEOL 36 - Geology Laboratory of Coastal California 1 unit *
- OCEA 10 - Introduction to Oceanography 4 units *
- PSCI 25 - Exploring Physical Sciences 3 units *
- PHYS 1A - Mechanics of Solids 4 units *
- PHYS 1B - Fluids, Heat and Sound 3 units *
- PHYS 1C - Electricity and Magnetism 4 units *
- PHYS 1D - Optics and Modern Physics 4 units
- PHYS 2A - General Physics 4 units *
- PHYS 2B - General Physics 4 units *
- PHYS 3A - General Physics with Calculus 5 units *
- PHYS 3B - General Physics with Calculus 5 units *
- PHYS 11 - Descriptive Introduction to Physics 3 units
- PHYS 12 - Laboratory for Introductory Physics 1 unit *

2. Life Sciences:

- ANAT 30 - Essentials of Anatomy and Physiology 4 units *
- ANAT 32 - General Human Anatomy 4 units *
- APHY 34A - Anatomy and Physiology I 4 units *
- APHY 34B - Anatomy and Physiology II 4 units *
- ANTH 1 - Introduction to Physical Anthropology 3 units
- ANTH 5 - Physical Anthropology Laboratory 1 unit *
- BIOL 8 - Biology of Plants 4 units *
- BIOL 10 - Fundamentals of Biology 4 units *
- BIOL 11 - Fundamentals of Zoology 4 units *
- BIOL 12 - Field Zoology 4 units *
- BIOL 15 - Environmental Aspects of Biology 3 units
- BIOL 16 - Field Entomology 4 units *
- BIOL 17 - Marine Biology 3 units
- BIOL 18 - Marine Biology Laboratory 1 unit *

- BIOL 101 - Principles of Biology I 5 units *
- BIOL 101H - Honors Principles of Biology I 5 units
- BIOL 102 - Principles of Biology II 5 units *
- BIOL 102H - Honors Principles of Biology II 5 units
- BIOL 103 - Fundamentals of Molecular Biology 3 units
- MICR 33 - General Microbiology 5 units *
- PHYO 31 - Human Physiology 4 units *
- PSYC 7 - Physiological Psychology 3 units

3. The courses listed above in B.1. and B.2. marked with an asterisk meet the laboratory requirement.

4. Mathematics/Quantitative Reasoning:

- BUS 15 - Business Mathematics 3 units
- BUS 17 - Personal Finance 3 units
- MATH 110 - Structures and Concepts in Mathematics 3 units
- MATH 120 - Nature of Mathematics 3 units
- MATH 130 - College Algebra 3 units
- MATH 140 - Finite Mathematics for Business and Social Sciences 4 units
- MATH 150 - Elementary Statistics with Probability 4 units
- MATH 150H - Honors Elementary Statistics with Probability 4 units
- Mathematics 160
- Mathematics 161
- MATH 165 - Calculus for Business and Social Sciences 5 units
- MATH 170 - Trigonometry 3 units
- MATH 180 - Pre-Calculus 5 units
- MATH 190 - Single Variable Calculus and Analytic Geometry I 5 units
- MATH 210 - Introduction to Discrete Structures 5 units
- MATH 220 - Multi-Variable Calculus 5 units
- MATH 270 - Differential Equations with Linear Algebra 5 units
- PSYC 9A - Introduction to Statistics and Data Analysis for the Behavioral Sciences 4 units
- Sociology 109

Area C - Arts, Literature, Philosophy and Foreign Languages

minimum 9 semester units or 12 quarter units

At least one course from subsection 1 and one course from subsection 2.

1. Arts:

- ARCH 104 - History of Western Architecture 3 units
- ARCH 107 - World Architecture: Pre-History to Middle Ages 3 units
- ARCH 108 - World Architecture: Gothic to Early Modern 3 units
- ART 101 - Art and Visual Culture: A Global Perspective 3 units
- ART 102A - History of Western Art - Prehistoric to Gothic 3 units
- ART 102AH - Honors History of Western Art - Prehistoric to Gothic 3 units
- ART 102B - History of Western Art - Proto-Renaissance to 19th Century 3 units
- ART 102C - History of Western Art - 19th Century to Contemporary Times 3 units
- ART 106 - Cross-Cultural Art 3 units
- ART 109 - Contemporary Art in World Cultures 3 units
- ART 150 - The Art of Photography 3 units
- ART 205A - History of Asian Art - India and Southeast Asia 3 units
- ART 205B - History of Asian Art - China, Korea, and Japan 3 units

- ART 207 - Art History of Mexico and Central and South America 3 units
- ART 208 - History of American Art 3 units
- ART 209 - History of African Art 3 units
- COMS 250 - Oral Interpretation of Literature 3 units
- DANC 101 - Dance Appreciation 3 units
- DANC 103 - History of Dance in the 20th Century 3 units
- FASH 31 - History of Costume 3 units
- FILM 110 - Film Appreciation 3 units
- FILM 154 - Regional Cinemas 3 units
- MUSI 111 - Music Appreciation Survey 3 units
- MUSI 112 - Music Cultures of the World 3 units
- MUSI 112H - Honors Music Cultures of the World 3 units
- MUSI 113 - Survey of Jazz 3 units
- MUSI 116 - History of Rock Music 3 units
- MUSI 117 - Music of the Beatles 3 units
- MUSI 215A - Music History and Literature up to 1750 3 units
- MUSI 215B - Music History and Literature - 1750 to Present 3 units
- PHOT 150 - The Art of Photography 3 units
- THEA 103 - Theatre Appreciation 3 units
- THEA 104 - Dramatic Literature 3 units
- THEA 113 - Introduction to Acting 3 units

2. Humanities:

- ASTU 7 - History of American Popular Culture 3 units
- CHIN 1 - Elementary Chinese I 4 units
- CHIN 2 - Elementary Chinese II 4 units
- CHIN 3 - Intermediate Chinese I 4 units
- CHIN 24 - Introduction to Chinese Language and Culture 3 units
- ENGL 1B - Literature and Composition 3 units
- ENGL 1BH - Honors Literature and Composition 3 units
- ENGL 12 - Introduction to Fiction 3 units
- ENGL 15A - Survey of British Literature I 3 units
- ENGL 15B - Survey of British Literature II 3 units
- ENGL 20 - Shakespeare's Plays - Tragedies and Romances 3 units
- ENGL 21 - Shakespeare's Plays - Comedies and Histories 3 units
- ENGL 24A - Creative Writing: Introduction to Poetry 3 units
- ENGL 25A - Creative Writing: Introduction to the Craft of Fiction 3 units
- ENGL 27 - Children's Literature 3 units
- ENGL 28 - Images of Women in Literature 3 units
- ENGL 30 - The English Bible as Literature 3 units
- ENGL 31 - Mythology and Folklore 3 units
- ENGL 34 - The Short Story 3 units
- ENGL 35 - World Literature: 3500 BCE to 1650 CE 3 units
- ENGL 36 - World Literature: 1650 CE to Present 3 units
- ENGL 39 - Literature and Film 3 units
- ENGL 40A - American Literature I 3 units
- ENGL 40B - American Literature II 3 units
- ENGL 41B - Survey of Film: 1950 to the Present 3 units
- ENGL 42 - Chicano and Latino Literature 3 units
- ENGL 43 - African American Literature 3 units
- ENGL 44 - The Literature of American Ethnic Groups 3 units
- ENGL 48 - Modern Literature of Latin America 3 units
- FILM 153 - American Independent Cinema 3 units

- FREN 1 - Elementary French I 4 units
- FREN 2 - Elementary French II 4 units
- FREN 3 - Intermediate French I 4 units
- FREN 4 - Intermediate French II 4 units
- FREN 5 - Advanced French I 3 units
- FREN 6 - Advanced French II 3 units
- GERM 1 - Elementary German I 4 units
- GERM 2 - Elementary German II 4 units
- HIST 101 - United States History to 1877 3 units
- HIST 102 - United States History from 1877 to the Present 3 units
- HIST 105 - Women and American History from the Colonial Era to 1877 3 units
- HIST 106 - Women and American History from 1877 to the Present 3 units
- HIST 108 - United States History: The American Indian Experience 3 units
- HIST 110 - The African American in the United States to 1877 3 units
- HIST 111 - The African American in the United States from 1877 to the Present 3 units
- HIST 112 - History of the Chicano in the United States 3 units
- HIST 114 - History of the Asian American in the United States 3 units
- HIST 122 - United States Social History: Cultural Pluralism in America 3 units
- HIST 128 - History of California 3 units
- HIST 129 - History of Los Angeles 3 units
- HIST 140 - History of Early Civilizations 3 units
- HIST 141 - History of Modern Civilizations 3 units
- History 143
- HIST 152 - History of Latin America through Independence 3 units
- HIST 154 - A History of Mexico 3 units
- History 162
- History 163
- HUMA 1 - An Introduction to the Humanities 3 units
- ITAL 1 - Elementary Italian I 4 units
- ITAL 2 - Elementary Italian II 4 units
- ITAL 24 - Introduction to Italian Culture 3 units
- JAPA 1 - Elementary Japanese I 4 units
- JAPA 2 - Elementary Japanese II 4 units
- JAPA 3 - Intermediate Japanese I 4 units
- JAPA 4 - Intermediate Japanese II 4 units
- JAPA 25 - Cultural Aspects of the Japanese Language 3 units
- PHIL 101 - Introduction to Philosophy 3 units
- PHIL 103 - Ethics and Society 3 units
- PHIL 107 - Philosophy of Religion 3 units
- PHIL 111 - History of Ancient and Medieval Philosophy 3 units
- PHIL 112 - History of Modern Philosophy 3 units
- Philosophy 113
- PHIL 114 - Asian Philosophy 3 units
- PHIL 115 - Existentialism 3 units
- PHIL 117 - Political Philosophy 3 units
- PHIL 120 - Ethics, Law and Society 3 units
- POLI 7 - Political Philosophy 3 units
- SLAN 111 - American Sign Language I 4 units
- SLAN 112 - American Sign Language II 4 units
- Sign Language/Interpreter Training 113
- SLAN 114 - American Sign Language IV 4 units
- SLAN 115 - American Sign Language V 4 units
- SLAN 130 - Deaf Culture 3 units

- SPAN 1 - Elementary Spanish I 4 units
- SPAN 2 - Elementary Spanish II 4 units
- SPAN 3 - Intermediate Spanish I 4 units
- SPAN 4 - Intermediate Spanish II 4 units
- SPAN 5 - Advanced Spanish I 3 units
- SPAN 6 - Advanced Spanish II 3 units
- SPAN 52A - Spanish for Native Speakers I 4 units
- SPAN 52B - Spanish for Native Speakers II 4 units

Area D - Social, Political and Economic Institutions and Behavior; Historical Background
minimum 9 semester units or 12 quarter units

Courses must be selected from at least two different subsections.

Courses listed in more than one subsection/area can be used for credit in one subsection/area only.

1. Anthropology and Archaeology:

- ANTH 2 - Introduction to Cultural Anthropology 3 units
- ANTH 3 - Introduction to Archaeology 3 units
- Anthropology 4
- ANTH 6 - Native Peoples of North America 3 units
- ANTH 7 - Native Peoples of South America 3 units
- ANTH 8 - Ancient Civilizations of Mesoamerica 3 units
- ANTH 9 - Women, Culture, and Society 3 units
- ANTH 11 - Anthropology of Religion, Magic and Witchcraft 3 units

2. Economics:

- ECON 1 - Principles of Economics: Macroeconomics 3 units
- ECON 2 - Principles of Economics: Microeconomics Theory 3 units
- ECON 5 - Fundamentals of Economics 3 units

3. Ethnic Studies:

- COMS 260 - Introduction to Intercultural Communication 3 units
- COMS 275 - Gender Communication 3 units
- ESTU 1 - Introduction to Ethnic Studies 3 units
- ESTU 3 - The Chicano in Contemporary United States Society 3 units
- ESTU 5 - Chicano Culture 3 units
- HIST 108 - United States History: The American Indian Experience 3 units
- HIST 110 - The African American in the United States to 1877 3 units
- HIST 111 - The African American in the United States from 1877 to the Present 3 units
- HIST 112 - History of the Chicano in the United States 3 units
- HIST 122 - United States Social History: Cultural Pluralism in America 3 units
- POLI 5 - Ethnicity in the American Political Process 3 units
- PSYC 10 - African American Psychology 3 units
- SOCI 107 - Issues of Race and Ethnicity in the United States 3 units

4. Gender Studies:

- ANTH 9 - Women, Culture, and Society 3 units
- HIST 105 - Women and American History from the Colonial Era to 1877 3 units
- HIST 106 - Women and American History from 1877 to the Present 3 units
- WSTU 1 - Introduction to Women's Studies 3 units

5. Geography:

- GEOG 2 - Cultural Geography 3 units
- GEOG 5 - World Regional Geography 3 units
- GEOG 5H - Honors World Regional Geography 3 units
- GEOG 7 - Geography of California 3 units

6. History:

- HIST 101 - United States History to 1877 3 units
- HIST 102 - United States History from 1877 to the Present 3 units
- HIST 105 - Women and American History from the Colonial Era to 1877 3 units
- HIST 106 - Women and American History from 1877 to the Present 3 units
- HIST 108 - United States History: The American Indian Experience 3 units
- HIST 110 - The African American in the United States to 1877 3 units
- HIST 111 - The African American in the United States from 1877 to the Present 3 units
- HIST 112 - History of the Chicano in the United States 3 units
- HIST 114 - History of the Asian American in the United States 3 units
- HIST 122 - United States Social History: Cultural Pluralism in America 3 units
- HIST 128 - History of California 3 units
- HIST 129 - History of Los Angeles 3 units
- HIST 140 - History of Early Civilizations 3 units
- HIST 141 - History of Modern Civilizations 3 units
- History 143
- HIST 152 - History of Latin America through Independence 3 units
- HIST 154 - A History of Mexico 3 units
- History 162
- History 163

7. Interdisciplinary Social/Behavioral Science:

- ASTU 7 - History of American Popular Culture 3 units
- BUS 22 - Human Relations in Organizations 3 units
- CDEV 103 - Child Growth and Development 3 units
- COMS 260 - Introduction to Intercultural Communication 3 units
- COMS 265 - Mass Communication 3 units
- JOUR 12 - Mass Media and Society 3 units
- SLAN 130 - Deaf Culture 3 units

8. Political Science, Government and Legal Institutions:

- PHIL 117 - Political Philosophy 3 units
- POLI 1 - Governments of the United States and California 3 units
- POLI 1H - Honors Governments of the United States and California 3 units
- POLI 2 - Introduction to Comparative Politics 3 units
- POLI 3 - Introduction to Principles and Methods of Political Science 3 units
- POLI 5 - Ethnicity in the American Political Process 3 units
- POLI 6 - Civil Rights and Liberties in the United States 3 units
- POLI 7 - Political Philosophy 3 units
- POLI 10 - Introduction to International Relations 3 units

9. Psychology:

- PE 275 - Sport Psychology 3 units
- PSYC 2 - Psychology for Effective Living 3 units
- PSYC 5 - General Psychology 3 units
- PSYC 5H - Honors General Psychology 3 units

- PSYC 8 - Social Psychology 3 units
- PSYC 9B - Research Methods in the Behavioral Sciences 4 units
- PSYC 10 - African American Psychology 3 units
- PSYC 12 - Human Sexuality 3 units
- PSYC 15 - Abnormal Psychology 3 units
- PSYC 16 - Lifespan Development 3 units
- PSYC 17 - Cultural Psychology 3 units

10. Sociology and Criminology:

- SOCI 101 - Introduction to Sociology 3 units
- SOCI 102 - The Family 3 units
- SOCI 104 - Social Problems 3 units
- SOCI 107 - Issues of Race and Ethnicity in the United States 3 units
- SOCI 108 - Global Perspectives on Race and Ethnicity 3 units
- SOCI 112 - Introduction to Criminology 3 units
- SOCI 113 - Gender and Society 3 units
- SOCI 115 - Sociology of Death and Dying 3 units
- SSCI 101 - Introduction to Social Sciences 3 units
- SSCI 103 - Introduction to Social Justice Studies 3 units

Area E - Lifelong Understanding and Self-Development

minimum 3 semester units or 4-5 quarter units

- BUS 22 - Human Relations in Organizations 3 units
- CDEV 103 - Child Growth and Development 3 units
- CH 1 - Personal and Community Health Issues 3 units
- CH 5 - Contemporary Women's Health 3 units
- HDEV 110 - Strategies for Creating Success in College and in Life 3 units
- HDEV 115 - Career Development Across the Lifespan 3 units
- NFOO 11 - Nutrition 3 units
- PE 258 - Power Vinyasa Yoga 1 unit
- PE 259 - Circuit Training 1 unit
- PE 275 - Sport Psychology 3 units
- PE 280 - Exercise and Nutrition Programs for Fitness and Weight Management 3 units
- PSYC 2 - Psychology for Effective Living 3 units
- PSYC 12 - Human Sexuality 3 units
- PSYC 16 - Lifespan Development 3 units
- SOCI 102 - The Family 3 units

One unit may be taken from:

- Physical Education 10
- PE 2 - Walking for Fitness 1 unit
- PE 3 - Boot Camp Fitness Training 1 unit
- PE 4 - Basketball 1 unit
- PE 7 - Baseball 1 unit
- PE 47 - Introduction to Indoor Rock Climbing 1 unit
- PE 54 - Weight Training 1 unit
- PE 57abc - Intercollegiate Swimming Teams 3 units
- PE 58abc - Off-Season Training for Intercollegiate Swimming Teams 1 unit
- Physical Education 65abc
- PE 66abc - Off-Season Training for Men's Intercollegiate Tennis Team 1 unit
- PE 70abc - Men's Intercollegiate Soccer Team 3 units
- PE 71abc - Off-Season Training for Men's Intercollegiate Soccer Team 1 unit

- Physical Education 74
- PE 80abc - Men's Intercollegiate Volleyball Team 3 units
- PE 81abc - Off-Season Training for Men's Intercollegiate Volleyball Team 1 unit
- PE 110abc - Women's Intercollegiate Volleyball Team 3 units
- PE 111abc - Off-Season Training for Women's Intercollegiate Volleyball Team 1 unit
- PE 132abc - Women's Intercollegiate Badminton Team 3 units
- PE 133abc - Off-Season Training for Women's Intercollegiate Badminton Team 1 unit
- PE 140abc - Intercollegiate Sand Volleyball Team 3 units
- PE 204 - Badminton 1 unit
- PE 220 - Naginata: A Japanese Martial Art 1 unit
- PE 221 - Combative Arts and Self Defense 1 unit
- PE 224 - Golf 1 unit
- PE 233 - Pep Squad and Cheer 1 unit
- PE 234ab - Pep Squad and Cheer Competition 1 unit
- Physical Education 240
- Physical Education 241
- PE 247 - Swimming, Lifeguard Training 2 units
- PE 249 - Swimming for Fitness 1 unit
- PE 250 - Techniques of Surfboard Riding 1 unit
- PE 251A - Beginning Tennis 1 unit
- PE 253 - Volleyball 1 unit
- PE 254 - Cardio Fitness and Body Sculpting 1 unit
- PE 257 - Yoga for Health and Fitness 1 unit
- PE 260 - Basic Principles of Fitness and Weight Control 1 unit
- PE 400 - Adapted Fitness 1 unit
- PE 401 - Adapted Strength Training 1 unit
- PE 402 - Adapted Swimming and Hydroexercise 1 unit
- PE 404 - Adapted Cardiovascular Fitness 1 unit
- PE 407 - Adapted Bowling 1 unit
- PE 409 - Adapted Yoga 1 unit

Note:

(Warning: an Area E approved two-unit course would be required with one of these one-unit courses to meet the 3 unit minimum. El Camino College does not currently offer an approved 2-unit course in this area. See your counselor for further information.)

All CSU campuses have a graduation requirement in U.S. History, Constitution, and American Ideals of 6 semester units. One course is required from Group 1 and one course is required from Group 2.

Group 1:

- HIST 101 - United States History to 1877 3 units
- HIST 102 - United States History from 1877 to the Present 3 units
- HIST 105 - Women and American History from the Colonial Era to 1877 3 units
- HIST 106 - Women and American History from 1877 to the Present 3 units
- HIST 108 - United States History: The American Indian Experience 3 units
- HIST 110 - The African American in the United States to 1877 3 units
- HIST 111 - The African American in the United States from 1877 to the Present 3 units
- HIST 112 - History of the Chicano in the United States 3 units
- HIST 122 - United States Social History: Cultural Pluralism in America 3 units

Group 2:

- POLI 1 - Governments of the United States and California 3 units

University of California Admission Requirements

To be minimally eligible for admission to the University of California as a transfer student, a student must fulfill the following criteria:

1. Complete 60 UC transferable semester units (90 quarter units) with a minimum GPA of 2.4 (2.8 for non-residents).
2. Complete the following course pattern requirements, earning a grade of C or better in each course: two transferable college courses in English composition; one transferable college course in mathematical concepts and quantitative reasoning; four transferable college courses chosen from at least two of the following subject areas: arts and humanities, social and behavioral sciences, and physical and biological sciences.

Note: The IGETC General Education Transfer Pattern will meet these course requirements. However, some students, depending on the transfer major and university, may not be well served by following IGETC.

3. Complete as many major preparation courses as possible. Major preparation may be viewed at www.assist.org. Note: Selective majors are requiring certain courses to be completed before transfer with a higher grade point average.

The University of California will accept up to 70 UC transferable units from a community college. Students who complete more than 70 units at the community college may still complete courses to fulfill course requirements but will receive subject credit.

Intersegmental General Education Transfer Curriculum (IGETC)

The Intersegmental General Education Transfer Curriculum (IGETC) is a series of courses prospective transfer students attending California community colleges may complete at the community college to satisfy the lower division breadth/general education requirements at both the University of California and the California State University.

Students have the option of completing the IGETC or the specific lower division breadth/general education requirements of the school or college at the campus they plan to attend. The IGETC must be completed prior to transfer. The University has an agreement with each California community college that specifies which of its courses may be applied to each category of the IGETC. All courses must be completed with a grade of C or better.

The IGETC is most helpful to students who want to keep their options open. Certain majors, however, will not be well served by following IGETC. Students who intend to transfer into majors that require extensive lower division preparation, such as those in engineering or the physical and natural sciences, should concentrate on completing as many prerequisites for the major before transfer.

The IGETC is not an admission requirement. Completing IGETC does not guarantee admission to the campus or program of choice. However, completing the lower division breadth/general education requirements, whether through the IGETC or the campus specific requirements, may be considered by the campus in the selection process. Students who do not complete the IGETC before transferring will be required to satisfy the campus-specific lower division general education requirements of the college they attend.

Certification

Certification means that the last community college attended prior to transfer will verify that the student has completed the entire IGETC pattern. It is the student's responsibility to obtain full certification during the last semester of attendance prior to transfer. IGETC certification may be requested in Admissions.

IGETC Course Requirements

Area 1: English Communication

UC and CSU transfers complete groups A and B; Group C is required for CSU transfers only.

Group A: ENGL 1A, ENGL 1AH

Group B: One course from: ENGL 1C, ENGL 1CH, PHIL 105, PSYC 3; [The following two - course combinations acceptable if ENGL 1B was taken prior to fall, 1993: ENGL 1B and PHIL 106 or ENGL 1B and PSYC 3 (PSYC 3 stands alone if taken fall, 1992 or later)]

Group C (CSU transfers only): One course from: COMS 100, COMS 120, COMS 130, COMS 140?

Area 2: Mathematical Concepts and Quantitative Reasoning

One course, 3 semester or 4-5 quarter units:

- MATH 115 - Probability and Statistics for Prospective Elementary School Teachers 3 units ø #
- MATH 120 - Nature of Mathematics 3 units
- MATH 130 - College Algebra 3 units +
- MATH 140 - Finite Mathematics for Business and Social Sciences 4 units
- MATH 150 - Elementary Statistics with Probability 4 units #
- MATH 150H - Honors Elementary Statistics with Probability 4 units
- MATH 160 #
- MATH 161 #
- MATH 165 - Calculus for Business and Social Sciences 5 units
- MATH 180 - Pre-Calculus 5 units #
- MATH 190 - Single Variable Calculus and Analytic Geometry I 5 units #
- MATH 191 - Single Variable Calculus and Analytic Geometry II 5 units #
- MATH 210 - Introduction to Discrete Structures 5 units
- MATH 220 - Multi-Variable Calculus 5 units
- MATH 270 - Differential Equations with Linear Algebra 5 units
- PSYC 9A - Introduction to Statistics and Data Analysis for the Behavioral Sciences 4 units ?
- SOCI 109 ?

Area 3: Arts and Humanities

Three courses, 9 semester or 12-15 quarter units; at least one course from Arts and one course from Humanities:

A. Arts:

- ART 101 - Art and Visual Culture: A Global Perspective 3 units
- ART 102A - History of Western Art - Prehistoric to Gothic 3 units
- ART 102AH - Honors History of Western Art - Prehistoric to Gothic 3 units
- ART 102B - History of Western Art - Proto-Renaissance to 19th Century 3 units
- ART 102C - History of Western Art - 19th Century to Contemporary Times 3 units
- ART 106 - Cross-Cultural Art 3 units
- ART 109 - Contemporary Art in World Cultures 3 units
- ART 150 - The Art of Photography 3 units
- ART 205A - History of Asian Art - India and Southeast Asia 3 units
- ART 205B - History of Asian Art - China, Korea, and Japan 3 units
- ART 207 - Art History of Mexico and Central and South America 3 units
- ART 208 - History of American Art 3 units
- ART 209 - History of African Art 3 units &
- DANC 101 - Dance Appreciation 3 units \$
- DANC 103 - History of Dance in the 20th Century 3 units °
- FILM 110 - Film Appreciation 3 units &
- FILM 154 - Regional Cinemas 3 units
- MUSI 111 - Music Appreciation Survey 3 units
- MUSI 112 - Music Cultures of the World 3 units
- MUSI 112H - Honors Music Cultures of the World 3 units
- MUSI 113 - Survey of Jazz 3 units
- MUSI 116 - History of Rock Music 3 units
- MUSI 117 - Music of the Beatles 3 units
- MUSI 215A - Music History and Literature up to 1750 3 units
- MUSI 215B - Music History and Literature - 1750 to Present 3 units
- PHOT 150 - The Art of Photography 3 units
- THEA 103 - Theatre Appreciation 3 units
- THEA 104 - Dramatic Literature 3 units

B. Humanities:

- ASTU 7 - History of American Popular Culture 3 units
- ANTH 4 - Language and Culture 3 units
- ANTH 11 - Anthropology of Religion, Magic and Witchcraft 3 units
- CHIN 2 - Elementary Chinese II 4 units ?
- CHIN 3 - Intermediate Chinese I 4 units
- CHIN 24 - Introduction to Chinese Language and Culture 3 units
- ENGL 1B - Literature and Composition 3 units +
- ENGL 1BH - Honors Literature and Composition 3 units
- ENGL 12 - Introduction to Fiction 3 units +
- ENGL 15A - Survey of British Literature I 3 units
- ENGL 15B - Survey of British Literature II 3 units
- ENGL 20 - Shakespeare's Plays - Tragedies and Romances 3 units
- ENGL 21 - Shakespeare's Plays - Comedies and Histories 3 units
- ENGL 27 - Children's Literature 3 units
- ENGL 28 - Images of Women in Literature 3 units
- ENGL 30 - The English Bible as Literature 3 units
- ENGL 31 - Mythology and Folklore 3 units
- ENGL 34 - The Short Story 3 units
- ENGL 35 - World Literature: 3500 BCE to 1650 CE 3 units
- ENGL 36 - World Literature: 1650 CE to Present 3 units
- ENGL 39 - Literature and Film 3 units
- ENGL 40A - American Literature I 3 units ~
- ENGL 40B - American Literature II 3 units ~
- ENGL 41B - Survey of Film: 1950 to the Present 3 units
- ENGL 42 - Chicano and Latino Literature 3 units ~
- ENGL 44 - The Literature of American Ethnic Groups 3 units
- ENGL 48 - Modern Literature of Latin America 3 units
- FILM 152
- FILM 153 - American Independent Cinema 3 units
- FREN 2 - Elementary French II 4 units
- FREN 3 - Intermediate French I 4 units
- FREN 4 - Intermediate French II 4 units
- GERM 2 - Elementary German II 4 units
- HIST 101 - United States History to 1877 3 units
- HIST 102 - United States History from 1877 to the Present 3 units
- HIST 105 - Women and American History from the Colonial Era to 1877 3 units
- HIST 106 - Women and American History from 1877 to the Present 3 units
- HIST 108 - United States History: The American Indian Experience 3 units
- HIST 110 - The African American in the United States to 1877 3 units
- HIST 111 - The African American in the United States from 1877 to the Present 3 units
- HIST 112 - History of the Chicano in the United States 3 units
- HIST 114 - History of the Asian American in the United States 3 units
- HIST 122 - United States Social History: Cultural Pluralism in America 3 units
- HIST 128 - History of California 3 units
- HIST 129 - History of Los Angeles 3 units
- HIST 140 - History of Early Civilizations 3 units
- HIST 141 - History of Modern Civilizations 3 units
- HIST 143
- HIST 152 - History of Latin America through Independence 3 units
- HIST 154 - A History of Mexico 3 units
- HIST 162
- HIST 163

- HUMA 1 - An Introduction to the Humanities 3 units ?
- ITAL 2 - Elementary Italian II 4 units
- ITAL 24 - Introduction to Italian Culture 3 units
- JAPA 2 - Elementary Japanese II 4 units
- JAPA 3 - Intermediate Japanese I 4 units
- JAPA 4 - Intermediate Japanese II 4 units
- JAPA 25 - Cultural Aspects of the Japanese Language 3 units
- PHIL 101 - Introduction to Philosophy 3 units
- PHIL 103 - Ethics and Society 3 units
- PHIL 107 - Philosophy of Religion 3 units
- PHIL 111 - History of Ancient and Medieval Philosophy 3 units
- PHIL 112 - History of Modern Philosophy 3 units
- PHIL 113
- PHIL 114 - Asian Philosophy 3 units
- PHIL 115 - Existentialism 3 units
- PHIL 117 - Political Philosophy 3 units
- PHIL 120 - Ethics, Law and Society 3 units
- POLI 7 - Political Philosophy 3 units
- SLAN 112 - American Sign Language II 4 units ?
- SLAN 113 - American Sign Language III 4 units ?
- SLAN 114 - American Sign Language IV 4 units
- SLAN 115 - American Sign Language V 4 units
- SLAN 130 - Deaf Culture 3 units
- SPAN 2 - Elementary Spanish II 4 units
- SPAN 3 - Intermediate Spanish I 4 units
- SPAN 4 - Intermediate Spanish II 4 units
- SPAN 52A - Spanish for Native Speakers I 4 units Σ
- SPAN 52B - Spanish for Native Speakers II 4 units Σ

Area 4: Social and Behavioral Sciences

Three courses, 9 semester or 12-15 quarter units, from at least two disciplines or an interdisciplinary sequence:

- ASTU 7 - History of American Popular Culture 3 units ~
- ANTH 2 - Introduction to Cultural Anthropology 3 units
- ANTH 3 - Introduction to Archaeology 3 units
- ANTH 4 - Language and Culture 3 units ?
- ANTH 6 - Native Peoples of North America 3 units
- ANTH 7 - Native Peoples of South America 3 units ?
- ANTH 8 - Ancient Civilizations of Mesoamerica 3 units °
- ANTH 9 - Women, Culture, and Society 3 units ?
- ANTH 11 - Anthropology of Religion, Magic and Witchcraft 3 units ?
- CDEV 103 - Child Growth and Development 3 units &
- COMS 260 - Introduction to Intercultural Communication 3 units ?
- COMS 265 - Mass Communication 3 units ?
- COMS 275 - Gender Communication 3 units
- ECON 1 - Principles of Economics: Macroeconomics 3 units
- ECON 2 - Principles of Economics: Microeconomics Theory 3 units
- ECON 5 - Fundamentals of Economics 3 units #
- ESTU 1 - Introduction to Ethnic Studies 3 units ?
- ESTU 3 - The Chicano in Contemporary United States Society 3 units
- ESTU 5 - Chicano Culture 3 units
- GEOG 2 - Cultural Geography 3 units
- GEOG 5 - World Regional Geography 3 units

- GEOG 5H - Honors World Regional Geography 3 units
- GEOG 7 - Geography of California 3 units
- HIST 101 - United States History to 1877 3 units
- HIST 102 - United States History from 1877 to the Present 3 units
- HIST 105 - Women and American History from the Colonial Era to 1877 3 units
- HIST 106 - Women and American History from 1877 to the Present 3 units
- HIST 108 - United States History: The American Indian Experience 3 units
- HIST 110 - The African American in the United States to 1877 3 units
- HIST 111 - The African American in the United States from 1877 to the Present 3 units
- HIST 112 - History of the Chicano in the United States 3 units
- HIST 122 - United States Social History: Cultural Pluralism in America 3 units
- HIST 128 - History of California 3 units
- HIST 129 - History of Los Angeles 3 units
- HIST 140 - History of Early Civilizations 3 units
- HIST 141 - History of Modern Civilizations 3 units
- HIST 143
- HIST 152 - History of Latin America through Independence 3 units
- HIST 154 - A History of Mexico 3 units
- JOUR 12 - Mass Media and Society 3 units
- PHIL 117 - Political Philosophy 3 units
- POLI 1 - Governments of the United States and California 3 units #
- POLI 2 - Introduction to Comparative Politics 3 units
- POLI 3 - Introduction to Principles and Methods of Political Science 3 units
- POLI 5 - Ethnicity in the American Political Process 3 units
- POLI 6 - Civil Rights and Liberties in the United States 3 units ±
- POLI 7 - Political Philosophy 3 units
- POLI 10 - Introduction to International Relations 3 units
- PSYC 2 - Psychology for Effective Living 3 units
- PSYC 5 - General Psychology 3 units
- PSYC 5H - Honors General Psychology 3 units
- PSYC 8 - Social Psychology 3 units
- PSYC 10 - African American Psychology 3 units ~
- PSYC 12 - Human Sexuality 3 units ?
- PSYC 15 - Abnormal Psychology 3 units ?
- PSYC 16 - Lifespan Development 3 units Σ
- PSYC 17 - Cultural Psychology 3 units
- SOCI 101 - Introduction to Sociology 3 units
- SOCI 102 - The Family 3 units ?
- SOCI 104 - Social Problems 3 units
- SOCI 107 - Issues of Race and Ethnicity in the United States 3 units ?
- SOCI 108 - Global Perspectives on Race and Ethnicity 3 units
- SOCI 112 - Introduction to Criminology 3 units ?
- SOCI 115 - Sociology of Death and Dying 3 units
- WSTU 1 - Introduction to Women's Studies 3 units >

Area 5: Physical and Biological Sciences

Two courses, 7-9 semester or 9-12 quarter units; one physical science course, one biological science course; at least one course must include a laboratory (*indicates a lab course):

A. Physical Sciences:

- ASTR 12 - Astronomy Laboratory 1 unit
- ASTR 20 - The Solar System 3 units #
- ASTR 25 - Stars and Galaxies 3 units #

- ASTR 25H - Honors Stars and Galaxies 3 units
- CHEM 1A - General Chemistry I 5 units *
- CHEM 1B - General Chemistry II 5 units *
- CHEM 4 - Beginning Chemistry 5 units * #
- CHEM 4H - Honors Beginning Chemistry 5 units
- CHEM 7A - Organic Chemistry I 5 units *
- CHEM 7B - Organic Chemistry II 5 units *
- CHEM 20 - Fundamentals of Chemistry 5 units * #
- CHEM 21A - Survey of General and Organic Chemistry 4 units *
- CHEM 21B - Survey of Organic and Biochemistry 4 units *
- GEOG 1 - Physical Geography 3 units
- GEOG 6 - Physical Geography Laboratory 1 unit *
- GEOG 9 - Weather and Climate 3 units
- GEOL 1 - Physical Geology 3 units
- GEOL 2 - History of Planet Earth 3 units
- GEOL 3 - Physical Geology Laboratory 1 unit *
- GEOL 4 - History of Planet Earth Laboratory 1 unit *
- GEOL 15 - Natural Disasters 3 units ^
- GEOL 30 - Geology Laboratory of Death Valley 1 unit *
- GEOL 32 - Geology Laboratory of Owens Valley and Sierra Nevada 1 unit *
- GEOL 34 - Geology Laboratory of Southeastern California 1 unit *
- GEOL 36 - Geology Laboratory of Coastal California 1 unit *
- OCEA 10 - Introduction to Oceanography 4 units *
- PSCI 25 - Exploring Physical Sciences 3 units ?
- PHYS 1A - Mechanics of Solids 4 units * #
- PHYS 1B - Fluids, Heat and Sound 3 units * #
- PHYS 1C - Electricity and Magnetism 4 units * #
- PHYS 1D - Optics and Modern Physics 4 units * #
- PHYS 2A - General Physics 4 units * #
- PHYS 2B - General Physics 4 units * #
- PHYS 3A - General Physics with Calculus 5 units * >
- PHYS 3B - General Physics with Calculus 5 units * \$
- PHYS 11 - Descriptive Introduction to Physics 3 units #
- PHYS 12 - Laboratory for Introductory Physics 1 unit * #

B. Biological Sciences:

- ANAT 30 - Essentials of Anatomy and Physiology 4 units * #
- ANAT 32 - General Human Anatomy 4 units * #
- APHY 34A - Anatomy and Physiology I 4 units *
- APHY 34B - Anatomy and Physiology II 4 units *
- ANTH 1 - Introduction to Physical Anthropology 3 units
- ANTH 5 - Physical Anthropology Laboratory 1 unit
- BIOL 8 - Biology of Plants 4 units * \$
- BIOL 10 - Fundamentals of Biology 4 units * #
- BIOL 11 - Fundamentals of Zoology 4 units * >
- BIOL 15 - Environmental Aspects of Biology 3 units
- BIOL 16 - Field Entomology 4 units *
- BIOL 17 - Marine Biology 3 units \$
- BIOL 18 - Marine Biology Laboratory 1 unit * \$
- BIOL 101 - Principles of Biology I 5 units *
- BIOL 101H - Honors Principles of Biology I 5 units
- BIOL 102 - Principles of Biology II 5 units *

- BIOL 102H - Honors Principles of Biology II 5 units
- BIOL 103 - Fundamentals of Molecular Biology 3 units \$
- MICR 33 - General Microbiology 5 units *
- PHYO 31 - Human Physiology 4 units #
- PSYC 7 - Physiological Psychology 3 units

C. Laboratory science courses are marked with an asterisk (*indicates a lab course):

Area 6 UC Only: Language other than English

The requirement may be met by one of the following:

A course at ECC: CH 1, FREN 1, GERM 1, ITAL 1, ITAL 2, JAPA 1, SLAN 111 ≠, SPAN 1, SPAN 52A, SPAN 52B.

1. Two years of high school coursework in a language other than English with a final grade of C or better. The two years must be in the same language (high school transcripts must be on file with ECC).
2. Foreign language course (or courses) at another college or university that is comparable to two years of high school foreign language.
3. Satisfactory score on the SAT II: Subject Test in languages other than English. (If taken before May 1995, use the first score; if taken after May 1995, use the second score): Chinese with Listening 500/520; French/French with Listening 500/540; German/German with Listening 500/510; Hebrew (modern) 500/470; Italian 500/520; Japanese with Listening 500/510; Korean /500; Latin 500/530; Spanish/Spanish with Listening 500/520.
4. Score of 3 or better on the College Board Advanced Placement Examinations in languages other than English.
5. Score of 5 or higher on the International Baccalaureate Higher Level Examinations in languages other than English.
6. A Defense Language Institute language other than English course which is indicated as passed with a "C" or higher on the official transcript.
7. Satisfactory completion of an achievement or proficiency test administered by a community college, university or other college in a language other than English. The test must assess the student proficiency at a level equivalent to at least two years of high school language. This conclusion must be posted on a transcript indicating unit, course title, and grade or on a document with letter head of the institution granting proficiency stating that the student has mastered proficiency in the language equivalent to two years of high school language.
8. Language other than English "O" level exam with a grade of A, B, or C.
9. Language other than English International "A" level exam with a score of 5, 6, 7.
10. Satisfactory completion of C grades or better, of two years of formal schooling at the sixth grade level or higher in an institution where the language of instruction is not English.

Note: If the secondary school was completed in a non-English speaking country and the language of instruction of the secondary school was not English, language other than English proficiency can be certified for IGETC without further evaluation. The student must present appropriate documentation of attendance at the secondary school.

CSU Only: Graduation requirement in American History and American Institutions: HIST 101, HIST 102, HIST 105, HIST 106, HIST 108, HIST 110, HIST 111, HIST 112, HIST 122
Institutions: POLI 1

+ Indicates course only acceptable in this area if taken fall, 1993 or later.

^ Indicates course only acceptable in this area if taken fall, 1995 or later

~ Indicates course only acceptable in this area if taken fall, 1997 or later.

> Indicates course only acceptable in this area if taken fall, 1998 or later.

\$ Indicates course only acceptable in this area if taken fall, 1999 or later.

° Indicates course only acceptable in this area if taken fall, 1999 or later.

? Indicates course only acceptable in this area if taken fall, 2001 or later.

Σ Indicates course only acceptable in this area if taken fall, 2002 or later.

∅ Indicates course only acceptable in this area if taken fall, 2003 or later.

& Indicates course only acceptable in this area if taken fall, 2004 or later.

© Indicates course only acceptable in this area if taken fall, 2005 or later.

± Indicates course only acceptable in this area if taken fall, 2006 or later.

? Indicates course only acceptable in this area if taken fall, 2007 or later.

Indicates that transfer credit may be limited by UC or CSU or both; please consult with a counselor.

Intersegmental General Education Transfer Curriculum (IGETC): For general education courses taken after fall 2008, please check with your academic counselor or www.assist.org for course applicability and limitations.

Degrees and Certificates

Administration of Justice, AA

Industry and Technology Division

www.elcamino.edu/academics/indtech

The administration of justice program prepares students for a career in criminal justice. By completing the program requirements, students gain the ability to apply principles of the justice system, constitutional and procedural considerations affecting arrest, search and seizure, human relations, and concepts of criminal law as well as demonstrate proficiency in report writing and record keeping. Career options include police officer, corrections officer, homeland security, private security, and crime scene investigator.

The pre-employment student should secure a complete physical examination from a licensed physician, preferably one who specializes in examination for law enforcement agencies. The applicant failing a medical examination should consult with instructors before applying for employment with a police agency.

At least 50 percent of the courses required for the major must be completed at El Camino College.
For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/adminjustice.

Required Core: 21 units

- AJ 100 - Introduction to Administration of Justice 3 units
- AJ 103 - Concepts of Criminal Law I 3 units
- AJ 115 - Community and Human Relations 3 units
- AJ 130 - Criminal Procedures 3 units
- AJ 131 - Legal Aspects of Evidence 3 units
- AJ 135 - Report Writing 3 units
- AJ 170 - Constitutional Law for Criminal Justice 3 units

6-11 units from:

- AJ 95 - Cooperative Work Experience Education 2-4 units
- AJ 106 - Criminal Justice Career Preparation 3 units
- AJ 107 - Crime and Control - An Introduction to Corrections 3 units
- AJ 109 - Introduction to Police Patrol Procedures 3 units
- AJ 111 - Criminal Investigation 3 units
- AJ 126 - Juvenile Delinquency and Legal Procedures 3 units
- AJ 132 - Forensic Crime Scene Investigation 3 units
- AJ 133 - Fingerprint Classification and Investigation 3 units
- AJ 134 - Introduction to Crime Analysis 3 units
- AJ 150 - Peace Officer Training Module - Level III 7 units
- AJ 155 - Peace Officer Training Module - Level II 10 units

Total Units: 27-32

Preparation for the Administration of Justice Transfer Major

For information on specific university major requirements, please obtain a transfer curriculum guide sheet in the Counseling Services Center, consult with your counselor, or visit the Transfer Center. You may use the transfer major requirements to help you fulfill your associate degree requirements.

Anthropology, AA

Behavioral and Social Sciences Division

www.elcamino.edu/academics/behavioralsocial

The anthropology program provides a foundation in the fields of socio-cultural anthropology, biological anthropology, and archaeology as they relate to the physical and behavioral aspects of the world's populations of the past and the present. Students in this program will be able to discern the basic issues facing anthropologists, apply the methodologies that anthropologists use to approach the problems in the field, and critically evaluate the record of past accomplishments. This major prepares students for career opportunities in museums, educational, archeological and medical institutions, international development consulting organizations, social welfare, and state and national management entities. Competencies will be assessed regularly through examinations and projects.

Required Core: 12 units

- ANTH 1 - Introduction to Physical Anthropology 3 units
- ANTH 2 - Introduction to Cultural Anthropology 3 units
- ANTH 3 - Introduction to Archaeology 3 units
- ANTH 4 - Language and Culture 3 units

7-9 units from:

- ANTH 5 - Physical Anthropology Laboratory 1 unit

- ANTH 6 - Native Peoples of North America 3 units
- ANTH 7 - Native Peoples of South America 3 units
- ANTH 8 - Ancient Civilizations of Mesoamerica 3 units
- ANTH 9 - Women, Culture, and Society 3 units
- ANTH 11 - Anthropology of Religion, Magic and Witchcraft 3 units
- GEOG 5 - World Regional Geography 3 units
- GEOG 5H - Honors World Regional Geography 3 units

Total Units: 19-21

Preparation for the Anthropology Transfer Major

For information on specific university major requirements, please obtain a transfer curriculum guide sheet in the Counseling Services Center, consult with your counselor, or visit the Transfer Center. You may use the transfer major requirements to help you fulfill your associate degree requirements.

Art, AA

Fine Arts Division

www.elcamino.edu/academics/finearts

The art program provides students with a comprehensive foundation in the history, theory, and practice of art. Each student acquires observational, compositional, technical, interpretative, and expressive competency through participation in an extensive range of studio art courses. Exposure to a culturally diverse art history curriculum prepares each student to analyze, assess, and discuss works of art from a variety of historical and style periods. Proficiencies are demonstrated through class projects, critiques, research papers, essays, and objective tests. Program assessment is measured by portfolios, juried and public exhibitions, program completion, transferability and periodic program reviews. Students will be prepared to transfer and major in arts, and pursue a variety of art-related careers. For Gainful Employment program information, please visit www.elcamino.edu/academics/finearts/art.

Art - Art History Option:

Required Core: 9 units

- ART 110 - Drawing Fundamentals I 3 units
- ART 130 - Two-Dimensional Design I 3 units
- ART 160 - Three-Dimensional Design 3 units

15 units from:

- ART 102A - History of Western Art - Prehistoric to Gothic 3 units
- ART 102B - History of Western Art - Proto-Renaissance to 19th Century 3 units
- ART 102C - History of Western Art - 19th Century to Contemporary Times 3 units
- ART 106 - Cross-Cultural Art 3 units
- ART 109 - Contemporary Art in World Cultures 3 units
- ART 194 - Gallery Management and Artist Career Issues 4 units
- ART 205A - History of Asian Art - India and Southeast Asia 3 units
- ART 205B - History of Asian Art - China, Korea, and Japan 3 units
- ART 207 - Art History of Mexico and Central and South America 3 units

- ART 208 - History of American Art 3 units

or

- ART 208H - Honors History of American Art 3 units

- ART 209 - History of African Art 3 units

2-3 units from:

- ART 129 - Fundamentals of Color 3 units
- ART 131 - Lettering and Typography I 3 units
- ART 132 - Advertising Design I 3 units
- ART 133 - Graphic Design 3 units
- ART 141 - Digital Art Fundamentals 3 units
- ART 142 - Digital Imaging Fundamentals 3 units
- ART 143 - Digital Publishing Fundamentals 3 units
- ART 144 - 3D Modeling and Animation 3 units
- ART 145 - Web Animation and Games 3 units
- ART 146 - Designing for the World Wide Web 3 units
- ART 147 - Motion Graphics 3 units
- ART 152 - Rendering 3 units
- ART 153 - Illustration I 3 units
- ART 161 - Beginning Ceramics 3 units
- ART 173 - Introduction to Jewelry and Metalsmithing 3 units

- ART 181 - Beginning Sculpture 3 units
- ART 187 - Printmaking I - Etching and Relief 3 units
- ART 210 - Drawing Fundamentals II 3 units
- ART 217 - Life Drawing I 3 units
- ART 218 - Life Drawing II 3 units
- ART 219 - Watercolor Painting I 3 units
- ART 220 - Watercolor Painting II 3 units
- ART 222 - Fundamentals of Painting I 3 units
- ART 223A - Fundamentals of Painting II 3 units
- ART 223B - Fundamentals of Painting III 3 units
- ART 230 - Two-Dimensional Design II 3 units
- ART 231 - Lettering and Typography II 3 units
- ART 232 - Advertising Design II 3 units
- ART 233 - Graphic Design II 3 units
- ART 253 - Illustration II 3 units
- ART 262 - Intermediate Ceramics 3 units
- ART 263 - Advanced Ceramics 3 units
- ART 274 - Jewelry Fabrication 3 units
- ART 275 - Jewelry Casting 3 units
- ART 282 - Life Sculpture 3 units
- ART 283 - Bronze Casting 3 units
- ART 288 - Printmaking II - Etching and Relief 3 units
- ART 289 - Lithography 3 units
- ART 290 - Screen Printing 3 units
- PHOT 101 - Elementary Photography 2 units

Total Units: 26-27

Note: Most transfer colleges will also require a foreign language for a B.A. degree in Art History.

Art - Studio Art Option:

Required Core: 9 units

- ART 110 - Drawing Fundamentals I 3 units
- ART 130 - Two-Dimensional Design I 3 units
- ART 160 - Three-Dimensional Design 3 units

6 units from:

- ART 102A - History of Western Art - Prehistoric to Gothic 3 units
- ART 102B - History of Western Art - Proto-Renaissance to 19th Century 3 units
- ART 102C - History of Western Art - 19th Century to Contemporary Times 3 units
- ART 106 - Cross-Cultural Art 3 units
- ART 109 - Contemporary Art in World Cultures 3 units
- ART 205A - History of Asian Art - India and Southeast Asia 3 units
- ART 205B - History of Asian Art - China, Korea, and Japan 3 units
- ART 207 - Art History of Mexico and Central and South America 3 units

- ART 208 - History of American Art 3 units

or

- ART 208H - Honors History of American Art 3 units

- ART 209 - History of African Art 3 units

12 units from:

- ART 129 - Fundamentals of Color 3 units
- ART 131 - Lettering and Typography I 3 units
- ART 132 - Advertising Design I 3 units
- ART 133 - Graphic Design 3 units
- ART 141 - Digital Art Fundamentals 3 units
- ART 142 - Digital Imaging Fundamentals 3 units
- ART 143 - Digital Publishing Fundamentals 3 units
- ART 144 - 3D Modeling and Animation 3 units
- ART 145 - Web Animation and Games 3 units
- ART 146 - Designing for the World Wide Web 3 units
- ART 147 - Motion Graphics 3 units
- ART 152 - Rendering 3 units
- ART 153 - Illustration I 3 units

- ART 161 - Beginning Ceramics 3 units
- ART 173 - Introduction to Jewelry and Metalsmithing 3 units
- ART 181 - Beginning Sculpture 3 units
- ART 187 - Printmaking I - Etching and Relief 3 units
- ART 194 - Gallery Management and Artist Career Issues 4 units
- ART 210 - Drawing Fundamentals II 3 units
- ART 217 - Life Drawing I 3 units
- ART 218 - Life Drawing II 3 units
- ART 219 - Watercolor Painting I 3 units
- ART 220 - Watercolor Painting II 3 units
- ART 222 - Fundamentals of Painting I 3 units
- ART 223A - Fundamentals of Painting II 3 units
- ART 223B - Fundamentals of Painting III 3 units
- ART 224 - Life Painting I 3 units
- ART 225A - Life Painting II 3 units
- ART 230 - Two-Dimensional Design II 3 units
- ART 231 - Lettering and Typography II 3 units
- ART 232 - Advertising Design II 3 units
- ART 233 - Graphic Design II 3 units
- ART 253 - Illustration II 3 units
- ART 262 - Intermediate Ceramics 3 units
- ART 263 - Advanced Ceramics 3 units
- ART 274 - Jewelry Fabrication 3 units
- ART 275 - Jewelry Casting 3 units
- ART 282 - Life Sculpture 3 units
- ART 283 - Bronze Casting 3 units
- ART 288 - Printmaking II - Etching and Relief 3 units
- ART 289 - Lithography 3 units
- ART 290 - Screen Printing 3 units
- PHOT 101 - Elementary Photography 2 units

Total Units: 27

The department recommends that the following subjects be included in a student's program if emphasis in a particular area is desired:

Painting and Drawing:

- ART 210 - Drawing Fundamentals II 3 units
- ART 217 - Life Drawing I 3 units
- ART 218 - Life Drawing II 3 units
- ART 219 - Watercolor Painting I 3 units
- ART 220 - Watercolor Painting II 3 units
- ART 222 - Fundamentals of Painting I 3 units
- ART 223A - Fundamentals of Painting II 3 units
- ART 223B - Fundamentals of Painting III 3 units
- ART 224 - Life Painting I 3 units
- ART 225

Ceramics:

- ART 161 - Beginning Ceramics 3 units
- ART 262 - Intermediate Ceramics 3 units
- ART 263 - Advanced Ceramics 3 units

Computer Animation:

- ART 110 - Drawing Fundamentals I 3 units
- ART 141 - Digital Art Fundamentals 3 units
- ART 142 - Digital Imaging Fundamentals 3 units
- ART 144 - 3D Modeling and Animation 3 units
- ART 147 - Motion Graphics 3 units
- ART 217 - Life Drawing I 3 units

Digital Illustration:

- ART 110 - Drawing Fundamentals I 3 units
- ART 130 - Two-Dimensional Design I 3 units
- ART 141 - Digital Art Fundamentals 3 units
- ART 142 - Digital Imaging Fundamentals 3 units
- ART 153 - Illustration I 3 units

- ART 253 - Illustration II 3 units

Digital Photography:

- ART 110 - Drawing Fundamentals I 3 units

or

- ART 130 - Two-Dimensional Design I 3 units

- ART 141 - Digital Art Fundamentals 3 units
- ART 142 - Digital Imaging Fundamentals 3 units

Design:

- ART 129 - Fundamentals of Color 3 units
- ART 141 - Digital Art Fundamentals 3 units
- ART 142 - Digital Imaging Fundamentals 3 units
- ART 143 - Digital Publishing Fundamentals 3 units
- ART 144 - 3D Modeling and Animation 3 units
- ART 145 - Web Animation and Games 3 units

Graphic Design:

- ART 129 - Fundamentals of Color 3 units
- ART 131 - Lettering and Typography I 3 units
- ART 132 - Advertising Design I 3 units
- ART 133 - Graphic Design 3 units
- ART 141 - Digital Art Fundamentals 3 units
- ART 142 - Digital Imaging Fundamentals 3 units
- ART 143 - Digital Publishing Fundamentals 3 units
- ART 144 - 3D Modeling and Animation 3 units
- ART 145 - Web Animation and Games 3 units
- ART 146 - Designing for the World Wide Web 3 units
- ART 147 - Motion Graphics 3 units
- ART 152 - Rendering 3 units
- ART 153 - Illustration I 3 units
- ART 231 - Lettering and Typography II 3 units
- ART 232 - Advertising Design II 3 units
- ART 253 - Illustration II 3 units

Graphic Design for Print Publishing:

- ART 130 - Two-Dimensional Design I 3 units
- ART 131 - Lettering and Typography I 3 units
- ART 132 - Advertising Design I 3 units
- ART 141 - Digital Art Fundamentals 3 units
- ART 142 - Digital Imaging Fundamentals 3 units
- ART 143 - Digital Publishing Fundamentals 3 units

Jewelry/Metalsmithing:

- ART 173 - Introduction to Jewelry and Metalsmithing 3 units
- ART 274 - Jewelry Fabrication 3 units
- ART 275 - Jewelry Casting 3 units

Photography:

- PHOT 102 - Basic Photography 3 units
- PHOT 202 - Intermediate Photography 4 units
- PHOT 223A - Theory of Color/Color Printing 4 units

or

- PHOT 101 - Elementary Photography 2 units

Printmaking:

- ART 187 - Printmaking I - Etching and Relief 3 units
- ART 288 - Printmaking II - Etching and Relief 3 units
- ART 289 - Lithography 3 units

Motion Graphics/Visual Effects:

- ART 130 - Two-Dimensional Design I 3 units
- ART 141 - Digital Art Fundamentals 3 units
- ART 142 - Digital Imaging Fundamentals 3 units
- ART 144 - 3D Modeling and Animation 3 units
- ART 147 - Motion Graphics 3 units

Sculpture:

- ART 181 - Beginning Sculpture 3 units

- ART 282 - Life Sculpture 3 units
- ART 283 - Bronze Casting 3 units

Television and Media:

- COMS 270 - Organizational Communication 3 units

Web Design:

- ART 130 - Two-Dimensional Design I 3 units
- ART 132 - Advertising Design I 3 units
- ART 141 - Digital Art Fundamentals 3 units
- ART 142 - Digital Imaging Fundamentals 3 units
- ART 145 - Web Animation and Games 3 units
- ART 146 - Designing for the World Wide Web 3 units

Preparation for the Art Transfer Major

For information on specific university major requirements, please obtain a transfer curriculum guide sheet in the Counseling Services Center, consult with your counselor, or visit the Transfer Center. You may use the transfer major requirements to help you fulfill your associate degree requirements.

Associate of Arts Degree

A.A. Degree Requirements

Section A - General Education Requirements

A student has three options to complete the General Education Requirements.

Option I is designed for students completing the El Camino College major.

Option II is designed for students completing CSU GE Breadth transfer requirements.

Option III is designed for students completing CSU/UC (IGETC) transfer requirements.

Option I: El Camino College Requirements

Complete the specified number of units in categories 1 through 5 and the mathematics competency requirement in category 6.

1. Natural Sciences:

minimum 3 semester units

- ANAT 30 - Essentials of Anatomy and Physiology 4 units
- ANAT 32 - General Human Anatomy 4 units
- APHY 34A - Anatomy and Physiology I 4 units
- APHY 34B - Anatomy and Physiology II 4 units
- ANTH 1 - Introduction to Physical Anthropology 3 units
- ANTH 5 - Physical Anthropology Laboratory 1 unit
- ASTR 12 - Astronomy Laboratory 1 unit
- ASTR 20 - The Solar System 3 units
- ASTR 20H - Honors The Solar System 3 units
- ASTR 25 - Stars and Galaxies 3 units
- ASTR 25H - Honors Stars and Galaxies 3 units
- BIOL 8 - Biology of Plants 4 units
- BIOL 10 - Fundamentals of Biology 4 units
- BIOL 10H - Honors Fundamentals of Biology 4 units
- BIOL 11 - Fundamentals of Zoology 4 units
- BIOL 12 - Field Zoology 4 units
- BIOL 15 - Environmental Aspects of Biology 3 units
- BIOL 16 - Field Entomology 4 units
- BIOL 17 - Marine Biology 3 units
- BIOL 18 - Marine Biology Laboratory 1 unit
- BIOL 101 - Principles of Biology I 5 units
- BIOL 101H - Honors Principles of Biology I 5 units
- BIOL 102 - Principles of Biology II 5 units
- BIOL 102H - Honors Principles of Biology II 5 units
- BIOL 103 - Fundamentals of Molecular Biology 3 units
- CHEM 1A - General Chemistry I 5 units
- CHEM 1B - General Chemistry II 5 units
- CHEM 4 - Beginning Chemistry 5 units
- CHEM 7A - Organic Chemistry I 5 units
- CHEM 7B - Organic Chemistry II 5 units

- CHEM 20 - Fundamentals of Chemistry 5 units
- CHEM 21A - Survey of General and Organic Chemistry 4 units
- CHEM 21B - Survey of Organic and Biochemistry 4 units
- GEOG 1 - Physical Geography 3 units
- GEOG 6 - Physical Geography Laboratory 1 unit
- GEOG 7 - Geography of California 3 units
- GEOG 9 - Weather and Climate 3 units
- GEOL 1 - Physical Geology 3 units
- GEOL 2 - History of Planet Earth 3 units
- GEOL 3 - Physical Geology Laboratory 1 unit
- GEOL 4 - History of Planet Earth Laboratory 1 unit
- GEOL 6 - Earth Science in Education 4 units
- GEOL 15 - Natural Disasters 3 units
- GEOL 30 - Geology Laboratory of Death Valley 1 unit
- GEOL 32 - Geology Laboratory of Owens Valley and Sierra Nevada 1 unit
- GEOL 34 - Geology Laboratory of Southeastern California 1 unit
- GEOL 36 - Geology Laboratory of Coastal California 1 unit
- MICR 33 - General Microbiology 5 units
- OCEA 10 - Introduction to Oceanography 4 units
- OCEA 10H - Honors Introduction to Oceanography 4 units
- PSCI 25 - Exploring Physical Sciences 3 units
- PHYS 1A - Mechanics of Solids 4 units
- PHYS 1B - Fluids, Heat and Sound 3 units
- PHYS 1C - Electricity and Magnetism 4 units
- PHYS 1D - Optics and Modern Physics 4 units
- PHYS 2A - General Physics 4 units
- PHYS 2B - General Physics 4 units
- PHYS 3A - General Physics with Calculus 5 units
- PHYS 3B - General Physics with Calculus 5 units
- PHYS 11 - Descriptive Introduction to Physics 3 units
- PHYS 12 - Laboratory for Introductory Physics 1 unit
- PHYO 31 - Human Physiology 4 units
- PSYC 7 - Physiological Psychology 3 units

2. Social and Behavioral Science:

minimum 9 semester units

One course from A, one course from B, and one course from C:

A.

- ASTU 7 - History of American Popular Culture 3 units
- COMS 275 - Gender Communication 3 units
- HIST 101 - United States History to 1877 3 units
- HIST 101H - Honors United States History to 1877 3 units
- HIST 102 - United States History from 1877 to the Present 3 units
- HIST 102H - Honors United States History from 1877 to the Present 3 units
- HIST 105 - Women and American History from the Colonial Era to 1877 3 units
- HIST 106 - Women and American History from 1877 to the Present 3 units
- HIST 108 - United States History: The American Indian Experience 3 units
- HIST 110 - The African American in the United States to 1877 3 units
- HIST 111 - The African American in the United States from 1877 to the Present 3 units
- HIST 112 - History of the Chicano in the United States 3 units
- HIST 122 - United States Social History: Cultural Pluralism in America 3 units
- HIST 122H - Honors United States Social History: Cultural Pluralism in America 3 units
- HIST 128 - History of California 3 units
- SSCI 103 - Introduction to Social Justice Studies 3 units
- WSTU 1 - Introduction to Women's Studies 3 units

B.

- PHIL 117 - Political Philosophy 3 units
- POLI 1 - Governments of the United States and California 3 units
- POLI 1H - Honors Governments of the United States and California 3 units
- POLI 5 - Ethnicity in the American Political Process 3 units
- POLI 6 - Civil Rights and Liberties in the United States 3 units
- POLI 7 - Political Philosophy 3 units
- SSCI 103 - Introduction to Social Justice Studies 3 units

C.

- ANTH 2 - Introduction to Cultural Anthropology 3 units
- ANTH 3 - Introduction to Archaeology 3 units
- ANTH 4 - Language and Culture 3 units
- ANTH 6 - Native Peoples of North America 3 units
- ANTH 7 - Native Peoples of South America 3 units
- ANTH 8 - Ancient Civilizations of Mesoamerica 3 units
- ANTH 9 - Women, Culture, and Society 3 units
- ANTH 11 - Anthropology of Religion, Magic and Witchcraft 3 units
- BUS 22 - Human Relations in Organizations 3 units
- CDEV 103 - Child Growth and Development 3 units
- CDEV 104 - The Home, The School, The Community 3 units
- COMS 260 - Introduction to Intercultural Communication 3 units
- COMS 265 - Mass Communication 3 units
- COMS 270 - Organizational Communication 3 units
- ECON 1 - Principles of Economics: Macroeconomics 3 units
- ECON 1H - Honors Principles of Economics: Macroeconomics 3 units
- ECON 2 - Principles of Economics: Microeconomics Theory 3 units
- ECON 5 - Fundamentals of Economics 3 units
- ESTU 1 - Introduction to Ethnic Studies 3 units
- ESTU 3 - The Chicano in Contemporary United States Society 3 units
- ESTU 5 - Chicano Culture 3 units
- FILM 100 - Introduction to Electronic Media 3 units
- GEOG 2 - Cultural Geography 3 units
- GEOG 5 - World Regional Geography 3 units
- GEOG 7 - Geography of California 3 units
- HIST 129 - History of Los Angeles 3 units
- HIST 140 - History of Early Civilizations 3 units
- HIST 141 - History of Modern Civilizations 3 units
- History 143
- HIST 152 - History of Latin America through Independence 3 units
- HIST 154 - A History of Mexico 3 units
- History 162
- History 163
- JOUR 12 - Mass Media and Society 3 units
- PHIL 117 - Political Philosophy 3 units
- POLI 2 - Introduction to Comparative Politics 3 units
- POLI 3 - Introduction to Principles and Methods of Political Science 3 units
- POLI 7 - Political Philosophy 3 units
- POLI 10 - Introduction to International Relations 3 units
- POLI 10H - Honors Introduction to International Relations 3 units
- PSYC 2 - Psychology for Effective Living 3 units
- PSYC 5 - General Psychology 3 units
- PSYC 5H - Honors General Psychology 3 units
- PSYC 7 - Physiological Psychology 3 units
- PSYC 8 - Social Psychology 3 units
- PSYC 10 - African American Psychology 3 units
- PSYC 12 - Human Sexuality 3 units
- PSYC 15 - Abnormal Psychology 3 units
- PSYC 16 - Lifespan Development 3 units
- PSYC 17 - Cultural Psychology 3 units
- SOCI 101 - Introduction to Sociology 3 units
- SOCI 101H - Honors Introduction to Sociology 3 units
- SOCI 102 - The Family 3 units
- SOCI 104 - Social Problems 3 units
- SOCI 107 - Issues of Race and Ethnicity in the United States 3 units
- SOCI 108 - Global Perspectives on Race and Ethnicity 3 units
- SOCI 112 - Introduction to Criminology 3 units
- SOCI 113 - Gender and Society 3 units
- SSCI 101 - Introduction to Social Sciences 3 units
- SSCI 103 - Introduction to Social Justice Studies 3 units

3. Humanities:

minimum 3 semester units

- ARCH 104 - History of Western Architecture 3 units
- ART 101 - Art and Visual Culture: A Global Perspective 3 units
- ART 102A - History of Western Art - Prehistoric to Gothic 3 units
- ART 102AH - Honors History of Western Art - Prehistoric to Gothic 3 units
- ART 102B - History of Western Art - Proto-Renaissance to 19th Century 3 units
- ART 102C - History of Western Art - 19th Century to Contemporary Times 3 units
- ART 106 - Cross-Cultural Art 3 units
- ART 109 - Contemporary Art in World Cultures 3 units
- ART 150 - The Art of Photography 3 units
- ART 205A - History of Asian Art - India and Southeast Asia 3 units
- ART 205B - History of Asian Art - China, Korea, and Japan 3 units
- ART 207 - Art History of Mexico and Central and South America 3 units
- ART 208 - History of American Art 3 units
- ART 208H - Honors History of American Art 3 units
- ART 209 - History of African Art 3 units
- CHIN 1 - Elementary Chinese I 4 units
- CHIN 2 - Elementary Chinese II 4 units
- CHIN 3 - Intermediate Chinese I 4 units
- CHIN 24 - Introduction to Chinese Language and Culture 3 units
- COMS 250 - Oral Interpretation of Literature 3 units
- DANC 101 - Dance Appreciation 3 units
- DANC 103 - History of Dance in the 20th Century 3 units
- ENGL 1B - Literature and Composition 3 units
- ENGL 1BH - Honors Literature and Composition 3 units
- ENGL 12 - Introduction to Fiction 3 units
- ENGL 15A - Survey of British Literature I 3 units
- ENGL 15B - Survey of British Literature II 3 units
- ENGL 20 - Shakespeare's Plays - Tragedies and Romances 3 units
- ENGL 21 - Shakespeare's Plays - Comedies and Histories 3 units
- ENGL 23A - Introduction to Creative Nonfiction 3 units
- ENGL 27 - Children's Literature 3 units
- ENGL 28 - Images of Women in Literature 3 units
- ENGL 30 - The English Bible as Literature 3 units
- ENGL 31 - Mythology and Folklore 3 units
- ENGL 34 - The Short Story 3 units
- ENGL 35 - World Literature: 3500 BCE to 1650 CE 3 units
- ENGL 36 - World Literature: 1650 CE to Present 3 units
- ENGL 39 - Literature and Film 3 units
- ENGL 40A - American Literature I 3 units
- ENGL 40B - American Literature II 3 units
- ENGL 41B - Survey of Film: 1950 to the Present 3 units
- ENGL 42 - Chicano and Latino Literature 3 units
- ENGL 43 - African American Literature 3 units
- ENGL 44 - The Literature of American Ethnic Groups 3 units
- ENGL 48 - Modern Literature of Latin America 3 units
- FASH 31 - History of Costume 3 units
- FILM 105 - Media Aesthetics 3 units
- FILM 110 - Film Appreciation 3 units
- FILM 113 - Screenplay Analysis 3 units
- FILM 114 - Story Development 3 units
- FILM 153 - American Independent Cinema 3 units
- FILM 154 - Regional Cinemas 3 units
- FREN 1 - Elementary French I 4 units
- FREN 2 - Elementary French II 4 units
- FREN 3 - Intermediate French I 4 units
- FREN 4 - Intermediate French II 4 units
- FREN 5 - Advanced French I 3 units
- FREN 6 - Advanced French II 3 units
- GERM 1 - Elementary German I 4 units
- GERM 2 - Elementary German II 4 units

- GERM 3 - Intermediate German I 4 units
- HUMA 1 - An Introduction to the Humanities 3 units
- ITAL 1 - Elementary Italian I 4 units
- ITAL 2 - Elementary Italian II 4 units
- ITAL 24 - Introduction to Italian Culture 3 units
- JAPA 1 - Elementary Japanese I 4 units
- JAPA 2 - Elementary Japanese II 4 units
- JAPA 3 - Intermediate Japanese I 4 units
- JAPA 4 - Intermediate Japanese II 4 units
- JAPA 25 - Cultural Aspects of the Japanese Language 3 units
- MUSI 101 - Music Fundamentals 3 units
- MUSI 111 - Music Appreciation Survey 3 units
- MUSI 112 - Music Cultures of the World 3 units
- MUSI 112H - Honors Music Cultures of the World 3 units
- MUSI 113 - Survey of Jazz 3 units
- MUSI 116 - History of Rock Music 3 units
- MUSI 117 - Music of the Beatles 3 units
- MUSI 215A - Music History and Literature up to 1750 3 units
- MUSI 215B - Music History and Literature - 1750 to Present 3 units
- PHIL 101 - Introduction to Philosophy 3 units
- PHIL 101H - Honors Introduction to Philosophy 3 units
- PHIL 103 - Ethics and Society 3 units
- PHIL 107 - Philosophy of Religion 3 units
- PHIL 111 - History of Ancient and Medieval Philosophy 3 units
- PHIL 112 - History of Modern Philosophy 3 units
- PHIL 114 - Asian Philosophy 3 units
- PHIL 115 - Existentialism 3 units
- PHIL 117 - Political Philosophy 3 units
- PHIL 120 - Ethics, Law and Society 3 units
- PHOT 150 - The Art of Photography 3 units
- POLI 7 - Political Philosophy 3 units
- SLAN 111 - American Sign Language I 4 units
- SLAN 112 - American Sign Language II 4 units
- SLAN 113 - American Sign Language III 4 units
- SLAN 114 - American Sign Language IV 4 units
- SLAN 115 - American Sign Language V 4 units
- SLAN 130 - Deaf Culture 3 units
- SLAN 131 - Perspective on Deafness 3 units
- SPAN 1 - Elementary Spanish I 4 units
- SPAN 1H - Honors Elementary Spanish I 4 units
- SPAN 2 - Elementary Spanish II 4 units
- SPAN 3 - Intermediate Spanish I 4 units
- SPAN 4 - Intermediate Spanish II 4 units
- SPAN 5 - Advanced Spanish I 3 units
- SPAN 6 - Advanced Spanish II 3 units
- SPAN 52A - Spanish for Native Speakers I 4 units
- SPAN 52B - Spanish for Native Speakers II 4 units
- THEA 103 - Theatre Appreciation 3 units
- THEA 104 - Dramatic Literature 3 units
- THEA 113 - Introduction to Acting 3 units
- PHIL 113 - Contemporary Philosophy 3 units

4. Language and Rationality: minimum 6 semester units

One course from A and one course from B:

A. English Composition: minimum 3 semester units

- BUS 27 - Effective English for Business 3 units
- BUS 28 - Written Business Communications 3 units
- ENGL 1A - Reading and Composition 4 units
- ENGL 1AH - Honors Reading and Composition 4 units

- JOUR 1 - News Writing and Reporting 3 units

B. Communication and Analytical Thinking:

minimum 3 semester units

- BUS 29 - Oral Business Communications 3 units
- COMS 100 - Public Speaking 3 units
- COMS 120 - Argumentation and Debate 3 units
- COMS 130 - Interpersonal Communication 3 units
- COMS 140 - Small Group Communication 3 units
- COMS 260 - Introduction to Intercultural Communication 3 units
- COMS 265 - Mass Communication 3 units
- COMS 270 - Organizational Communication 3 units
- CIS 13 - Computer Information Systems 3 units
- CIS 16 - Application Development and Programming Using Visual Basic.Net 3 units
- CIS 80 - Database Programming 4 units
- CSCI 1 - Problem Solving and Program Design Using C++ 4 units
- CSCI 7 - The Beauty of Computer Science Principles 4 units
- CSCI 14 - Computer Programming in Python for Computer Science 4 units
- ENGL 1B - Literature and Composition 3 units
- ENGL 1BH - Honors Literature and Composition 3 units
- ENGL 1C - Critical Thinking and Composition 3 units
- ENGL 1CH - Honors Critical Thinking and Composition 3 units
- JOUR 12 - Mass Media and Society 3 units
- MATH 73 - Intermediate Algebra for General Education 5 units
- MATH 80 - Intermediate Algebra for Science, Technology, Engineering, and Mathematics 5 units
- MATH 110 - Structures and Concepts in Mathematics 3 units
- MATH 115 - Probability and Statistics for Prospective Elementary School Teachers 3 units
- MATH 116 - Geometry and Measurement for Prospective Elementary School Teachers 3 units
- MATH 120 - Nature of Mathematics 3 units
- MATH 130 - College Algebra 3 units
- MATH 140 - Finite Mathematics for Business and Social Sciences 4 units
- MATH 150 - Elementary Statistics with Probability 4 units
- Mathematics 160
- Mathematics 161
- MATH 165 - Calculus for Business and Social Sciences 5 units
- MATH 170 - Trigonometry 3 units
- MATH 180 - Pre-Calculus 5 units
- MATH 190 - Single Variable Calculus and Analytic Geometry I 5 units
- MATH 191 - Single Variable Calculus and Analytic Geometry II 5 units
- MATH 210 - Introduction to Discrete Structures 5 units
- MATH 220 - Multi-Variable Calculus 5 units
- MATH 270 - Differential Equations with Linear Algebra 5 units
- PHIL 105 - Critical Thinking and Discourse 3 units
- PHIL 105H - Honors Critical Thinking and Discourse 3 units
- PHIL 106 - Introduction to Symbolic Logic 3 units
- PSYC 3 - Critical Thinking and Psychology 3 units
- PSYC 3H - Honors Critical Thinking and Psychology 3 units
- PSYC 9A - Introduction to Statistics and Data Analysis for the Behavioral Sciences 4 units
- Sociology 109
- SUPV 27 - Oral Business Communications 3 units

5. Health and Physical Education:

minimum 3 semester units

(This category may be exempted by one of the following:

1. Pass the Contemporary Health waiver exam; or
 2. Approval of a petition for military service credit.)
- CH 1 - Personal and Community Health Issues 3 units
 - CH 5 - Contemporary Women's Health 3 units
 - HDEV 110 - Strategies for Creating Success in College and in Life 3 units
 - HDEV 115 - Career Development Across the Lifespan 3 units
 - NFOO 11 - Nutrition 3 units
 - PSYC 2 - Psychology for Effective Living 3 units
 - PSYC 16 - Lifespan Development 3 units

- PE 260 - Basic Principles of Fitness and Weight Control 1 unit

Physical Activity or Fitness Courses:

Dance

- DANC 110 - Beginning Dance 2 units
- DANC 120A - Beginning Ballet A 2 units
- DANC 120B - Beginning Ballet B 2 units
- DANC 130A - Beginning Modern Dance A 2 units
- DANC 130B - Beginning Modern Dance B 2 units
- DANC 140 - Jazz Dance I 2 units
- DANC 161 - Tap Dance I - Beginning 1 unit
- DANC 162 - Hip Hop Dance 2 units
- DANC 164 - World Dance 1 unit
- DANC 165 - African Dance 1 unit
- DANC 167 - Social and Ballroom Dance 1 unit
- DANC 168 - Latin Social Dance 2 units
- DANC 171A - Beginning Choreography A 2 units
- DANC 220A - Intermediate Ballet A 2 units
- DANC 221 - Ballet Variations 2 units
- DANC 230A - Intermediate Modern Dance A 2 units
- DANC 240 - Jazz Dance II 2 units
- DANC 250 - Pilates Mat Class 3 units
- DANC 261 - Tap Dance II - Intermediate 2 units
- DANC 262 - Commercial Dance 2 units
- DANC 265 - Intermediate African Dance 2 units
- DANC 268 - Intermediate Latin Social Dance 2 units
- DANC 271A - Intermediate Choreography A 2 units

Physical Education

- PE 2 - Walking for Fitness 1 unit
- PE 3 - Boot Camp Fitness Training 1 unit
- PE 4 - Basketball 1 unit
- PE 5abc - Men's Intercollegiate Baseball Team 3 units
- PE 6abc - Off-Season Training For Men's Intercollegiate Baseball Team 1 unit
- PE 7 - Baseball 1 unit
- Physical Education 10
- PE 15abc - Men's Intercollegiate Basketball Team 3 units
- PE 16abc - Off-Season Training for Men's Intercollegiate Basketball Team 1 unit
- PE 18A - Beginning Boxing 1 unit
- PE 20abc - Intercollegiate Cross Country Teams 3 units
- PE 21abc - Off-Season Training for Intercollegiate Cross Country Teams 1 unit
- PE 35abc - Men's Intercollegiate Football Team 3 units
- PE 36abc - Off-Season Training for Men's Intercollegiate Football Team 1 unit
- PE 45abc - Men's Intercollegiate Golf Team 3 units
- PE 46abc - Off-Season Training for Men's Intercollegiate Golf Team 1 unit
- PE 47 - Introduction to Indoor Rock Climbing 1 unit
- PE 54 - Weight Training 1 unit
- PE 57abc - Intercollegiate Swimming Teams 3 units
- PE 58abc - Off-Season Training for Intercollegiate Swimming Teams 1 unit
- PE 60abc - Women's Intercollegiate Soccer Team 3 units
- PE 61abc - Off-Season Training for Women's Intercollegiate Soccer Team 1 unit
- Physical Education 65abc
- PE 66abc - Off-Season Training for Men's Intercollegiate Tennis Team 1 unit
- PE 70abc - Men's Intercollegiate Soccer Team 3 units
- PE 71abc - Off-Season Training for Men's Intercollegiate Soccer Team 1 unit
- Physical Education 74
- PE 75abc - Intercollegiate Track and Field Teams 3 units
- PE 76abc - Off-Season Training for Intercollegiate Track and Field Teams 1 unit
- PE 80abc - Men's Intercollegiate Volleyball Team 3 units
- PE 81abc - Off-Season Training for Men's Intercollegiate Volleyball Team 1 unit
- PE 85abc - Men's Intercollegiate Water Polo Team 3 units
- PE 86abc - Off-Season Training for Men's Intercollegiate Water Polo Team 1 unit
- PE 87abc - Women's Intercollegiate Water Polo Team 3 units
- PE 105abc - Women's Intercollegiate Basketball Team 3 units

- PE 106abc - Off-Season Training for Women's Intercollegiate Basketball Team 1 unit
- PE 110abc - Women's Intercollegiate Volleyball Team 3 units
- PE 111abc - Off-Season Training for Women's Intercollegiate Volleyball Team 1 unit
- PE 115abc - Intercollegiate Tennis Teams 3 units
- PE 116abc - Off-Season Training for Women's Intercollegiate Tennis Team 1 unit
- PE 120abc - Women's Intercollegiate Softball Team 3 units
- PE 121abc - Off-Season Training for Women's Intercollegiate Softball Team 1 unit
- PE 132abc - Women's Intercollegiate Badminton Team 3 units
- PE 133abc - Off-Season Training for Women's Intercollegiate Badminton Team 1 unit
- PE 135abcd - Sport-Specific, Periodized Training for Athletes 1 unit
- PE 140abc - Intercollegiate Sand Volleyball Team 3 units
- PE 204 - Badminton 1 unit
- PE 208 - Bowling 1 unit
- PE 221 - Combative Arts and Self Defense 1 unit
- PE 224 - Golf 1 unit
- PE 233 - Pep Squad and Cheer 1 unit
- PE 234ab - Pep Squad and Cheer Competition 1 unit
- PE 240A - Beginning Swimming
- PE 240B - Intermediate Swimming
- PE 240C - Advanced Swimming
- PE 245 - Water Aerobics 1 unit
- PE 249 - Swimming for Fitness 1 unit
- PE 250 - Techniques of Surfboard Riding 1 unit
- PE 251A - Beginning Tennis 1 unit
- PE 253 - Volleyball 1 unit
- PE 254 - Cardio Fitness and Body Sculpting 1 unit
- PE 255 - Beach Volleyball 1 unit
- PE 257 - Yoga for Health and Fitness 1 unit
- PE 258 - Power Vinyasa Yoga 1 unit
- PE 259 - Circuit Training 1 unit
- PE 266 - Stress Management for Healthy Living 3 unit
- PE 275 - Sport Psychology 3 units
- PE 280 - Exercise and Nutrition Programs for Fitness and Weight Management 3 units
- PE 400 - Adapted Fitness 1 unit
- PE 401 - Adapted Strength Training 1 unit
- PE 402 - Adapted Swimming and Hydroexercise 1 unit
- PE 404 - Adapted Cardiovascular Fitness 1 unit
- PE 407 - Adapted Bowling 1 unit
- PE 409 - Adapted Yoga 1 unit

6. Mathematics Competency

Pass the Mathematics Competency Test (a process separate from mathematics placement), which covers intermediate algebra, or satisfactorily complete one of the approved courses for this category.

- MATH 73 - Intermediate Algebra for General Education 5 units
- MATH 80 - Intermediate Algebra for Science, Technology, Engineering, and Mathematics 5 units
- MATH 110 - Structures and Concepts in Mathematics 3 units
- MATH 115 - Probability and Statistics for Prospective Elementary School Teachers 3 units
- MATH 116 - Geometry and Measurement for Prospective Elementary School Teachers 3 units
- MATH 120 - Nature of Mathematics 3 units
- MATH 130 - College Algebra 3 units
- MATH 140 - Finite Mathematics for Business and Social Sciences 4 units
- MATH 150 - Elementary Statistics with Probability 4 units
- MATH 165 - Calculus for Business and Social Sciences 5 units
- MATH 170 - Trigonometry 3 units
- MATH 180 - Pre-Calculus 5 units
- MATH 190 - Single Variable Calculus and Analytic Geometry I 5 units
- MATH 191 - Single Variable Calculus and Analytic Geometry II 5 units
- MATH 210 - Introduction to Discrete Structures 5 units
- MATH 220 - Multi-Variable Calculus 5 units
- MATH 270 - Differential Equations with Linear Algebra 5 units
- PSYC 9A - Introduction to Statistics and Data Analysis for the Behavioral Sciences 4 units
- Sociology 109

Option II: CSU GE Breadth Transfer Requirements

See CSU General Education Breadth Requirements.

Option III: CSU/UC (IGETC) Transfer Requirements

See Intersegmental General Education Transfer Curriculum (IGETC).

Section B - Major Requirements

Satisfy either the El Camino College Major option or the Transfer Major option.

El Camino College Major

Complete the courses specified for one of the majors listed alphabetically in Section IV, Curriculum, of this college catalog.

Transfer Major

Complete the lower division transfer major requirements for an accredited four-year college or university. If there are no lower division requirements in the transfer major or if the requirements for the transfer major are less than 18 units, students must complete an El Camino College major.

Section C - Electives

El Camino College Major

To reach the total of 60 degree applicable units required for graduation, students must choose electives from degree applicable courses. Students may count only six units of physical education as elective credit for graduation.

Transfer Major

Sixty degree applicable units are required for graduation. To qualify for transfer to CSU or UC, electives must be chosen from transferable courses. Students may count only four units of physical education as transfer credit.

Child Development, AA

Behavioral and Social Sciences Division

www.elcamino.edu/academics/behavioralsocial

The child development program prepares students for careers in private or public programs serving infants, toddlers, preschoolers, children with special needs, or children in before and after school care. The transfer degree option prepares students to continue studies at a four-year institution and major in Child Development, Child and Adolescent Development, Human Development, or Education. Students will acquire the ability to apply developmental theories in observing and assessing children in physical, cognitive, and psychosocial domains and will develop skills needed for working effectively with families, co-workers, and community agencies. Students will also gain the ability to design, implement, and evaluate developmentally appropriate and culturally sensitive curriculum. Program assessment will be conducted regularly through examinations, presentations, student self-assessment, portfolios, and tracking student employment and promotion in the teaching field.

A minimum of 12 units of the major requirements must be completed at El Camino College.

For Gainful Employment program information, please visit www.elcamino.edu/academics/behavioralsocial/childhooded/index.asp.

Required Core: 18 units

- CDEV 103 - Child Growth and Development 3 units
- CDEV 104 - The Home, The School, The Community 3 units
- CDEV 108 - Principles and Practices of Teaching Young Children 3 units
- CDEV 112 - Teaching Young Children in a Diverse Society 3 units
- CDEV 114 - Observing and Assessing Young Children 3 units

- CDEV 150 - Introduction to Children with Special Needs 3 units

or

- CDEV 152 - Curriculum and Strategies for Children with Special Needs 3 units

6 units from:

- CDEV 115 - Introduction to Curriculum 3 units
- CDEV 116 - Creative Art for Young Children 3 units
- CDEV 117 - Music and Movement for Young Children 3 units
- CDEV 118 - Science and Math for Young Children 3 units
- CDEV 119 - Language Arts for Young Children 3 units

3 units from:

- CDEV 106 - Care and Education for Infants and Toddlers 3 units
- CDEV 107 - Infant/Toddler Development 3 units
- CDEV 110 - Child Health, Safety, and Nutrition 3 units

- CDEV 115 - Introduction to Curriculum 3 units
- CDEV 116 - Creative Art for Young Children 3 units
- CDEV 117 - Music and Movement for Young Children 3 units
- CDEV 118 - Science and Math for Young Children 3 units
- CDEV 119 - Language Arts for Young Children 3 units
- CDEV 125 - Child Development Practicum I 3 units
- CDEV 126 - Child Development Practicum II 3 units
- CDEV 129 - Introduction to Program Administration 3 units
- CDEV 130 - Principles of Program Administration 3 units
- CDEV 131 - Supervising and Mentoring Adults 3 units
- CDEV 150 - Introduction to Children with Special Needs 3 units
- CDEV 152 - Curriculum and Strategies for Children with Special Needs 3 units
- CDEV 165 - Autism, ADHD, Physical and Health Impairments 3 units
- CDEV 169 - Special Education Practicum 3 units
- NFOO 15 - Nutrition for Infants and Young Children 3 units

Total Units: 27

Note: Proof of a valid Pediatric CPR and First Aid Certification and immunizations may be required for employment.

Preparation for the Child Development Transfer Major

For information on specific university major requirements, please obtain a transfer curriculum guide sheet in the Counseling Services Center, consult with your counselor, or visit the Transfer Center. You may use the transfer major requirements to help you fulfill your associate degree requirements.

Dance, AA

Fine Arts Division

www.elcamino.edu/academics/finearts

The degree provides students with a comprehensive foundation in the theory, history, technique, and art of dance. This is fulfilled through a structured program of dance study in the areas of core techniques, historical and contemporary styles, choreography, performance, and dance history. Students will demonstrate their proficiency through technical, interpretive, and expressive competency, research papers, essays, and public performances. Program assessment is measured by public performances, program completion, transferability, and periodic program review. Students qualify to pursue a variety of dance-related careers and advanced degree options.

Theory: 10 units

- DANC 103 - History of Dance in the 20th Century 3 units
- DANC 105 - Music for Dance 2 units
- DANC 170 - Improvisation 2 units
- DANC 250 - Pilates Mat Class 3 units

Choreography: 4 units

- DANC 271A - Intermediate Choreography A 2 units
- DANC 271B - Intermediate Choreography B 2 units

Ballet Technique: 6 units

- DANC 220A - Intermediate Ballet A 2 units
- DANC 220B - Intermediate Ballet B 2 units
- DANC 221 - Ballet Variations 2 units

Modern Dance Technique: 4 units

- DANC 230A - Intermediate Modern Dance A 2 units
- DANC 230B - Intermediate Modern Dance B 2 units

Performance: 4 units

- DANC 183ab - Dance Workshop Ensemble 1 unit *
- DANC 287ab - Concert Dance Ensemble 1 unit **
- DANC 289ab - Advanced Dance Theatre 1 unit

Electives: 2 units

- DANC 110 - Beginning Dance 2 units
- DANC 140 - Jazz Dance I 2 units ***
- DANC 161 - Tap Dance I - Beginning 1 unit
- DANC 162 - Hip Hop Dance 2 units
- DANC 164 - World Dance 1 unit
- DANC 165 - African Dance 1 unit
- DANC 167 - Social and Ballroom Dance 1 unit
- DANC 168 - Latin Social Dance 2 units

- DANC 240 - Jazz Dance II 2 units ***
- DANC 261 - Tap Dance II - Intermediate 2 units
- DANC 262 - Commercial Dance 2 units
- DANC 265 - Intermediate African Dance 2 units
- DANC 268 - Intermediate Latin Social Dance 2 units

Total Units: 30

It is essential that the transfer student see a counselor for appropriate curriculum.

* No more than 3 units of DANC 183ab may be counted for the major.

** Students are advised that at least one semester of DANC 287ab is required for transfer students.

***Some colleges and universities may not accept jazz courses toward the major.

Preparation for the Dance Transfer Major

For information on specific university major requirements, please obtain a transfer curriculum guide sheet in the Counseling Services center, consult with your counselor, or visit the Transfer Center. You may use the transfer major requirements to help you fulfill your associate degree requirements.

Economics, AA

Behavioral and Social Sciences Division

www.elcamino.edu/academics/behavioralsocial

The degree in economics is designed to provide students with a foundation in macroeconomics and microeconomics theory. Economics majors will acquire knowledge of the principle economic models for understanding how the national economy functions, the fundamental laws of supply and demand, and international trade theory. Students will be able to apply methodologies to assess fiscal and monetary policy, price levels, and the allocation of goods and resources in competitive and monopolistic markets. Competencies will be assessed through regularly scheduled objective and essay examinations and problem solving assignments.

Required Core: 13-16 units

- ECON 1 - Principles of Economics: Macroeconomics 3 units
or
- ECON 1H - Honors Principles of Economics: Macroeconomics 3 units
- ECON 2 - Principles of Economics: Microeconomics Theory 3 units
- MATH 160 - Calculus I for the Biological, Management and Social Sciences 4 units
and
- MATH 161 - Calculus II for the Biological, Management and Social Sciences 3 units
or
- MATH 165 - Calculus for Business and Social Sciences 5 units
or
- MATH 190 - Single Variable Calculus and Analytic Geometry I 5 units
and
- MATH 191 - Single Variable Calculus and Analytic Geometry II 5 units

6 units from:

- HIST 101 - United States History to 1877 3 units
- HIST 101H - Honors United States History to 1877 3 units
- HIST 102 - United States History from 1877 to the Present 3 units
- HIST 102H - Honors United States History from 1877 to the Present 3 units
- HIST 140 - History of Early Civilizations 3 units
- HIST 141 - History of Modern Civilizations 3 units
- POLI 1 - Governments of the United States and California 3 units
- POLI 1H - Honors Governments of the United States and California 3 units

Total Units: 19-22

Preparation for the Economics Transfer Major

For information on specific university major requirements, please obtain a transfer curriculum guide sheet in the Counseling Services Center, consult with your counselor, or visit the Transfer Center. You may use the transfer major requirements to help you fulfill your associate degree requirements.

English, AA

Humanities Division

www.elcamino.edu/academics/humanities

The degree program in English develops the student's ability to read both prose and poetry with understanding and discernment. The student will acquire competence in writing college-level expository essays and applying research strategies. The student will also develop interpretive and analytical skills through exposure to a wide range of literature. Competencies will be assessed primarily by evaluating the student's critical thinking abilities as demonstrated through written work. Completion of the program prepares the English major for any profession or industry requiring strong communication skills as well as transfer. At least 50 percent of the courses required for the English major must be completed at El Camino College.

Required Core: 7 units

- ENGL 1A - Reading and Composition 4 units
- ENGL 1AH - Honors Reading and Composition 4 units
- ENGL 1B - Literature and Composition 3 units
- ENGL 1BH - Honors Literature and Composition 3 units
- ENGL 1C - Critical Thinking and Composition 3 units
- ENGL 1CH - Honors Critical Thinking and Composition 3 units

a minimum of 6 units from Literature:

- ENGL 15A - Survey of British Literature I 3 units
- ENGL 15B - Survey of British Literature II 3 units
- ENGL 20 - Shakespeare's Plays - Tragedies and Romances 3 units
- ENGL 21 - Shakespeare's Plays - Comedies and Histories 3 units
- ENGL 35 - World Literature: 3500 BCE to 1650 CE 3 units
- ENGL 36 - World Literature: 1650 CE to Present 3 units
- ENGL 40A - American Literature I 3 units
- ENGL 40B - American Literature II 3 units

a minimum of 6 units from Electives:

- ENGL 1B - Literature and Composition 3 units *
- or
- ENGL 1BH - Honors Literature and Composition 3 units *

- ENGL 1C - Critical Thinking and Composition 3 units *
- or
- ENGL 1CH - Honors Critical Thinking and Composition 3 units *

- ENGL 12 - Introduction to Fiction 3 units
- ENGL 15A - Survey of British Literature I 3 units *
- ENGL 15B - Survey of British Literature II 3 units *
- ENGL 20 - Shakespeare's Plays - Tragedies and Romances 3 units *
- ENGL 21 - Shakespeare's Plays - Comedies and Histories 3 units *
- ENGL 24A - Creative Writing: Introduction to Poetry 3 units
- ENGL 25A - Creative Writing: Introduction to the Craft of Fiction 3 units
- ENGL 27 - Children's Literature 3 units
- ENGL 28 - Images of Women in Literature 3 units
- ENGL 30 - The English Bible as Literature 3 units
- ENGL 31 - Mythology and Folklore 3 units
- ENGL 32 - Creative Writing: A Workshop in Fiction 3 units
- ENGL 34 - The Short Story 3 units
- ENGL 35 - World Literature: 3500 BCE to 1650 CE 3 units *
- ENGL 36 - World Literature: 1650 CE to Present 3 units *
- ENGL 39 - Literature and Film 3 units
- ENGL 40A - American Literature I 3 units *
- ENGL 40B - American Literature II 3 units *
- ENGL 41B - Survey of Film: 1950 to the Present 3 units
- ENGL 42 - Chicano and Latino Literature 3 units
- ENGL 43 - African American Literature 3 units
- ENGL 44 - The Literature of American Ethnic Groups 3 units
- ENGL 48 - Modern Literature of Latin America 3 units
- ENGL 78 - Creative Writing: Screenwriting 3 units
- ENGL 98 - College Literary Magazine Editing and Publishing 3 units

Total Units: 19

Preparation for the English Transfer Major

For information on the specific university major requirements, please obtain a transfer curriculum guide sheet in the Counseling Services Center, consult with your counselor, or visit the Transfer Center. You may use the transfer major requirements to help you fulfill your associate degree requirements.

Ethnic Studies, AA

Behavioral and Social Sciences Division

www.elcamino.edu/academics/behavioralsocial

The degree in ethnic studies provides students with an interdisciplinary foundation for the study of American ethnic groups. The degree can be earned in a single ethnic subject category or in the combined American cultures option. The curriculum incorporates a range of cultural, historical, political, and sociological methodologies that provide students with a theoretical framework for analysis of the contributions, role and major issues of African Americans, Asian Americans, Chicanos, and Native Americans. Students will apply these theoretical perspectives to analyze socioeconomic and political factors that confront ethnic minorities as they interact with the majority society. Competencies will be assessed through examinations, essays, research papers, and directed projects.

African American Studies Option:

Required Core: 18 units

- ENGL 43 - African American Literature 3 units
- ESTU 1 - Introduction to Ethnic Studies 3 units
- HIST 110 - The African American in the United States to 1877 3 units
- HIST 111 - The African American in the United States from 1877 to the Present 3 units
- PSYC 10 - African American Psychology 3 units

3 units from:

- ART 209 - History of African Art 3 units
- ENGL 44 - The Literature of American Ethnic Groups 3 units
- HIST 122 - United States Social History: Cultural Pluralism in America 3 units
- MUSI 113 - Survey of Jazz 3 units
- POLI 5 - Ethnicity in the American Political Process 3 units
- SOCI 104 - Social Problems 3 units
- SOCI 107 - Issues of Race and Ethnicity in the United States 3 units

Total Units: 21

American Cultures Option:

Required Core: 3 units

- ESTU 1 - Introduction to Ethnic Studies 3 units

15 units from:

- ANTH 6 - Native Peoples of North America 3 units
- ART 207 - Art History of Mexico and Central and South America 3 units
- ENGL 42 - Chicano and Latino Literature 3 units
- ENGL 43 - African American Literature 3 units
- ENGL 44 - The Literature of American Ethnic Groups 3 units
- ESTU 3 - The Chicano in Contemporary United States Society 3 units
- ESTU 5 - Chicano Culture 3 units
- HIST 108 - United States History: The American Indian Experience 3 units
- HIST 110 - The African American in the United States to 1877 3 units
- HIST 111 - The African American in the United States from 1877 to the Present 3 units
- HIST 112 - History of the Chicano in the United States 3 units
- HIST 122 - United States Social History: Cultural Pluralism in America 3 units
- PSYC 10 - African American Psychology 3 units
- SOCI 107 - Issues of Race and Ethnicity in the United States 3 units

3 units from:

- ANTH 2 - Introduction to Cultural Anthropology 3 units
- HIST 154 - A History of Mexico 3 units
- MUSI 113 - Survey of Jazz 3 units
- POLI 5 - Ethnicity in the American Political Process 3 units
- SOCI 104 - Social Problems 3 units

Total Units: 21

Asian American Studies Option:

Required Core: 12 units

- ENGL 44 - The Literature of American Ethnic Groups 3 units
- ESTU 1 - Introduction to Ethnic Studies 3 units
- HIST 114 - History of the Asian American in the United States 3 units
- SOCI 107 - Issues of Race and Ethnicity in the United States 3 units

6 units from:

- ART 106 - Cross-Cultural Art 3 units
- ART 205A - History of Asian Art - India and Southeast Asia 3 units
- ART 205B - History of Asian Art - China, Korea, and Japan 3 units
- JAPA 25 - Cultural Aspects of the Japanese Language 3 units
- PHIL 115 - Existentialism 3 units
- POLI 5 - Ethnicity in the American Political Process 3 units
- SOCI 104 - Social Problems 3 units

Total Units: 18

Chicano Studies Option:

Required Core: 18 units

- ART 207 - Art History of Mexico and Central and South America 3 units
- ENGL 42 - Chicano and Latino Literature 3 units
- ESTU 3 - The Chicano in Contemporary United States Society 3 units
- ESTU 5 - Chicano Culture 3 units
- HIST 112 - History of the Chicano in the United States 3 units
- HIST 154 - A History of Mexico 3 units

3 units from:

- ENGL 44 - The Literature of American Ethnic Groups 3 units
- ESTU 1 - Introduction to Ethnic Studies 3 units
- HIST 122 - United States Social History: Cultural Pluralism in America 3 units
- POLI 5 - Ethnicity in the American Political Process 3 units
- SOCI 104 - Social Problems 3 units
- SOCI 107 - Issues of Race and Ethnicity in the United States 3 units

Total Units: 21

Native American Studies Option:

Required Core: 18 units

- ANTH 6 - Native Peoples of North America 3 units
- ENGL 44 - The Literature of American Ethnic Groups 3 units
- ESTU 1 - Introduction to Ethnic Studies 3 units
- HIST 108 - United States History: The American Indian Experience 3 units
- POLI 5 - Ethnicity in the American Political Process 3 units
- SOCI 107 - Issues of Race and Ethnicity in the United States 3 units

3 units from:

- ANTH 2 - Introduction to Cultural Anthropology 3 units
- ANTH 7 - Native Peoples of South America 3 units
- ANTH 8 - Ancient Civilizations of Mesoamerica 3 units
- ART 207 - Art History of Mexico and Central and South America 3 units
- SOCI 104 - Social Problems 3 units

Total Units: 21

Film/Video, AA

Fine Arts Division

www.elcamino.edu/academics/finearts

By completing the degree or certificate requirements, students gain both theoretical and practical knowledge in film/video production, scriptwriting, and media aesthetics. The curriculum prepares students for either entry-level employment in the entertainment and telecommunications industries or for transfer to a four-year degree program. Upon completion of the required courses, students will be able to write, shoot, and edit short films or videos and demonstrate basic skills necessary for operating various film, video, and digital production equipment. Degree and certificate competencies will be assessed regularly by evaluating student performance in producing individual and group projects.

For Gainful Employment program information, please visit www.elcamino.edu/academics/finearts/filmvideo.

Required Core: 12 units

- FILM 110 - Film Appreciation 3 units
- FILM 113 - Screenplay Analysis 3 units
- FILM 120 - Introduction to Film/Video Production 3 units
- FILM 122 - Production I 3 units

11-12 units from:

- ENGL 78 - Creative Writing: Screenwriting 3 units
- FILM 114 - Story Development 3 units
- FILM 121 - Audio Production 3 units
- FILM 124 - Production Planning 3 units
- FILM 128 - Television Production 3 units
- FILM 153 - American Independent Cinema 3 units
- FILM 154 - Regional Cinemas 3 units
- FILM 232 - Production II 3 units
- FILM 234 - Camera and Lighting 3 units
- FILM 236 - Editing 3 units
- FILM 95 - Cooperative Work Experience Education 2-4 units
- PHOT 101 - Elementary Photography 2 units

Total Units: 23-24

French, AA

Humanities Division

www.elcamino.edu/academics/humanities

By completing the degree requirements, the student will acquire proficiency in speaking, reading, writing, and understanding French and will gain knowledge of French and Francophone cultures. The student will be able to communicate in French, write formal compositions, and read the texts of French and Francophone authors, all at the intermediate-mid level of competency. Competencies will be assessed throughout the language sequence with written and oral exams. This major provides career opportunities where knowledge of French is useful and prepares students for continued advanced learning of French.

The student who has completed two or more years of French in high school will have the opportunity to enroll with advanced standing and to complete semesters 5 and/or 6 at El Camino College. It is recommended that language majors enroll in conversation classes. At least 50 percent of the courses required for the French major must be completed at El Camino College. French 4 must be completed at El Camino College.

Required Core: 4 units

- FREN 4 - Intermediate French II 4 units

4-11 units from:

- FREN 1 - Elementary French I 4 units
- FREN 2 - Elementary French II 4 units
- FREN 3 - Intermediate French I 4 units
- FREN 5 - Advanced French I 3 units
- FREN 6 - Advanced French II 3 units
- FREN 21 - Beginning Conversational French 2 units
- FREN 22 - Intermediate Conversational French 2 units

a minimum of 3 units from:

- ART 102B - History of Western Art - Proto-Renaissance to 19th Century 3 units
- ART 102C - History of Western Art - 19th Century to Contemporary Times 3 units
- ENGL 15A - Survey of British Literature I 3 units
- ENGL 15B - Survey of British Literature II 3 units
- ENGL 35 - World Literature: 3500 BCE to 1650 CE 3 units
- ENGL 36 - World Literature: 1650 CE to Present 3 units

- HIST 140 - History of Early Civilizations 3 units
- HIST 141 - History of Modern Civilizations 3 units

Total Units: 18

Preparation for the French Transfer Major

For information on specific university major requirements, please obtain a transfer curriculum guide sheet in the Counseling Services Center, consult with your counselor, or visit the Transfer Center. You may use the transfer major requirements to help your fulfill your associate degree requirements.

General Studies, AA

Behavioral and Social Sciences Division

www.elcamino.edu/academics/behavioralsocial

The Associate Degree in General Studies provides students with the opportunity to explore diverse methods of inquiry by selecting courses from a cross section of disciplines in an "area of emphasis." Students will develop critical thinking skills, learn to communicate effectively in writing, acquire an understanding of major concepts to solve problems, and employ methods of scientific inquiry to understand the world around them. Completion of the degree requirements will provide students with the skills and resources needed to make informed academic and career-related decisions.

Completion of the General Studies degree does not guarantee acceptance into a four-year university. Students planning to transfer to a CSU or UC should follow the CSU GE Breadth or IGETC pattern and complete transferable coursework that relates to the major at the CSU or UC campus. For further information and course selection, please consult with an academic counselor.

El Camino College Major Requirements

General Education:

Choose one of the following patterns:

1. Associate Degree General Education Requirements (minimum of 24 units and the math competency requirement).
2. CSU General Education Breadth (39 units) - This general education pattern will fulfill lower-division general education requirements at the CSU campuses.
3. Intersegmental General Education Transfer Curriculum (IGETC) (34 units) - This general education pattern will fulfill lower-division requirements at the CSU, UC and some private colleges and universities.

Area of Emphasis:

1. A minimum of 18 units are required in one Area of Emphasis listed below.
2. A minimum of one course from two different disciplines is required in the emphasis.
3. The courses selected in the emphasis may also be used to fulfill general education areas on the Associate Degree, CSU General Education Breadth, or IGETC.

Electives:

Elective units may be necessary to obtain the 60 degree applicable units that are required for the Associate Degree.

1. Area of Emphasis in Arts and Humanities:

These courses emphasize the appreciation of arts and humanities through cultural activities and artistic expression of human beings. Students will evaluate and interpret the ways in which people through the ages in different cultures have responded to themselves and the world around them in artistic and cultural creation. Students interested in transferring to a four-year university will have a basic foundation for further studies in areas such as arts, communications, English, foreign language, film studies, literature, history, journalism, or philosophy. This emphasis may be useful for students interested in possible career paths in fine arts, education, administration, or public service.

Select 18 units with at least one course in Arts and one course in Humanities.

Arts:

- ARCH 104 - History of Western Architecture 3 units
- ART 101 - Art and Visual Culture: A Global Perspective 3 units
- ART 102A - History of Western Art - Prehistoric to Gothic 3 units
- ART 102B - History of Western Art - Proto-Renaissance to 19th Century 3 units
- ART 102C - History of Western Art - 19th Century to Contemporary Times 3 units
- ART 106 - Cross-Cultural Art 3 units
- ART 109 - Contemporary Art in World Cultures 3 units
- ART 150 - The Art of Photography 3 units
- ART 205A - History of Asian Art - India and Southeast Asia 3 units
- ART 205B - History of Asian Art - China, Korea, and Japan 3 units
- ART 207 - Art History of Mexico and Central and South America 3 units

- ART 208 - History of American Art 3 units
or
- ART 208H - Honors History of American Art 3 units

- ART 209 - History of African Art 3 units
- COMS 250 - Oral Interpretation of Literature 3 units
- DANC 101 - Dance Appreciation 3 units
- DANC 103 - History of Dance in the 20th Century 3 units
- DANC 105 - Music for Dance 2 units
- FILM 110 - Film Appreciation 3 units
- FILM 113 - Screenplay Analysis 3 units
- MUSI 101 - Music Fundamentals 3 units
- MUSI 111 - Music Appreciation Survey 3 units
- MUSI 112 - Music Cultures of the World 3 units
- MUSI 113 - Survey of Jazz 3 units
- MUSI 116 - History of Rock Music 3 units
- MUSI 117 - Music of the Beatles 3 units
- MUSI 215A - Music History and Literature up to 1750 3 units
- MUSI 215B - Music History and Literature - 1750 to Present 3 units
- PHOT 150 - The Art of Photography 3 units
- THEA 103 - Theatre Appreciation 3 units
- THEA 104 - Dramatic Literature 3 units
- THEA 113 - Introduction to Acting 3 units

Humanities:

- CHIN 1 - Elementary Chinese I 4 units
- CHIN 2 - Elementary Chinese II 4 units
- CHIN 3 - Intermediate Chinese I 4 units
- CHIN 24 - Introduction to Chinese Language and Culture 3 units
- COMS 100 - Public Speaking 3 units
- COMS 120 - Argumentation and Debate 3 units
- COMS 130 - Interpersonal Communication 3 units
- COMS 140 - Small Group Communication 3 units
- COMS 260 - Introduction to Intercultural Communication 3 units
- COMS 265 - Mass Communication 3 units
- COMS 270 - Organizational Communication 3 units
- ENGL 1B - Literature and Composition 3 units
- ENGL 1BH - Honors Literature and Composition 3 units
- ENGL 1C - Critical Thinking and Composition 3 units
- ENGL 1CH - Honors Critical Thinking and Composition 3 units
- ENGL 12 - Introduction to Fiction 3 units
- ENGL 15A - Survey of British Literature I 3 units
- ENGL 15B - Survey of British Literature II 3 units
- ENGL 20 - Shakespeare's Plays - Tragedies and Romances 3 units
- ENGL 21 - Shakespeare's Plays - Comedies and Histories 3 units
- ENGL 24A - Creative Writing: Introduction to Poetry 3 units
- ENGL 25A - Creative Writing: Introduction to the Craft of Fiction 3 units
- ENGL 27 - Children's Literature 3 units
- ENGL 28 - Images of Women in Literature 3 units
- ENGL 30 - The English Bible as Literature 3 units
- ENGL 31 - Mythology and Folklore 3 units
- ENGL 32 - Creative Writing: A Workshop in Fiction 3 units
- ENGL 34 - The Short Story 3 units
- ENGL 35 - World Literature: 3500 BCE to 1650 CE 3 units
- ENGL 36 - World Literature: 1650 CE to Present 3 units
- ENGL 39 - Literature and Film 3 units
- ENGL 40A - American Literature I 3 units
- ENGL 40B - American Literature II 3 units
- ENGL 41B - Survey of Film: 1950 to the Present 3 units
- ENGL 42 - Chicano and Latino Literature 3 units
- ENGL 43 - African American Literature 3 units
- ENGL 44 - The Literature of American Ethnic Groups 3 units
- ENGL 78 - Creative Writing: Screenwriting 3 units
- FILM 153 - American Independent Cinema 3 units
- FILM 154 - Regional Cinemas 3 units
- FREN 1 - Elementary French I 4 units

- FREN 2 - Elementary French II 4 units
- FREN 3 - Intermediate French I 4 units
- FREN 4 - Intermediate French II 4 units
- FREN 5 - Advanced French I 3 units
- FREN 6 - Advanced French II 3 units
- GERM 1 - Elementary German I 4 units
- GERM 2 - Elementary German II 4 units
- HIST 101 - United States History to 1877 3 units
- HIST 102 - United States History from 1877 to the Present 3 units
- HIST 105 - Women and American History from the Colonial Era to 1877 3 units
- HIST 106 - Women and American History from 1877 to the Present 3 units
- HIST 108 - United States History: The American Indian Experience 3 units
- HIST 110 - The African American in the United States to 1877 3 units
- HIST 111 - The African American in the United States from 1877 to the Present 3 units
- HIST 112 - History of the Chicano in the United States 3 units
- HIST 122 - United States Social History: Cultural Pluralism in America 3 units
- HIST 128 - History of California 3 units
- HIST 129 - History of Los Angeles 3 units
- HIST 140 - History of Early Civilizations 3 units
- HIST 141 - History of Modern Civilizations 3 units
- HIST 143 - Twentieth Century World History 3 units
- HIST 152 - History of Latin America through Independence 3 units
- HIST 154 - A History of Mexico 3 units
- HUMA 1 - An Introduction to the Humanities 3 units
- ITAL 1 - Elementary Italian I 4 units
- ITAL 2 - Elementary Italian II 4 units
- ITAL 24 - Introduction to Italian Culture 3 units
- JAPA 1 - Elementary Japanese I 4 units
- JAPA 2 - Elementary Japanese II 4 units
- JAPA 3 - Intermediate Japanese I 4 units
- JAPA 4 - Intermediate Japanese II 4 units
- JAPA 25 - Cultural Aspects of the Japanese Language 3 units
- JOUR 1 - News Writing and Reporting 3 units
- JOUR 12 - Mass Media and Society 3 units
- PHIL 101 - Introduction to Philosophy 3 units
- PHIL 103 - Ethics and Society 3 units
- PHIL 105 - Critical Thinking and Discourse 3 units
- PHIL 106 - Introduction to Symbolic Logic 3 units
- PHIL 107 - Philosophy of Religion 3 units
- PHIL 111 - History of Ancient and Medieval Philosophy 3 units
- PHIL 112 - History of Modern Philosophy 3 units
- PHIL 113 - Contemporary Philosophy 3 units
- PHIL 114 - Asian Philosophy 3 units
- PHIL 115 - Existentialism 3 units
- PHIL 117 - Political Philosophy 3 units
- PHIL 120 - Ethics, Law and Society 3 units
- POLI 7 - Political Philosophy 3 units
- SLAN 111 - American Sign Language I 4 units
- SLAN 112 - American Sign Language II 4 units
- SLAN 113 - American Sign Language III 4 units
- SLAN 114 - American Sign Language IV 4 units
- SLAN 115 - American Sign Language V 4 units
- SLAN 130 - Deaf Culture 3 units
- SPAN 1 - Elementary Spanish I 4 units
- SPAN 2 - Elementary Spanish II 4 units
- SPAN 3 - Intermediate Spanish I 4 units
- SPAN 4 - Intermediate Spanish II 4 units
- SPAN 5 - Advanced Spanish I 3 units
- SPAN 6 - Advanced Spanish II 3 units
- SPAN 52A - Spanish for Native Speakers I 4 units
- SPAN 52B - Spanish for Native Speakers II 4 units

Total Units: 18

Note: ART 150 is the same course as PHOT 150. Course credit is limited to ART 150 or PHOT 150.

Note: PHIL 117 is the same course as POLI 7. Course credit is limited to PHIL 117 or POLI 7.

2. Area of Emphasis in Fine and Applied Arts:

These courses will emphasize the nature of artistic activities and expression of art through analysis, examination, performance, and technical development. Students will incorporate techniques, engage in performance, and learn to value aesthetic understanding and integrate these concepts when constructing value judgments. Students transferring to a four-year university will have a basic foundation for further studies in areas such as architecture, art, digital media, creative writing, dance, film, music, performing arts, photography, studio art, or theatre arts. This emphasis may be useful for students interested in possible career paths in design, graphic arts, visual arts, photography, stage technician, musician, education, television, journalism, or acting.

Select 18 units from at least two disciplines.

- ARCH 104 - History of Western Architecture 3 units
- ARCH 150A - Construction Documentation I 3 units
- ARCH 150B - Construction Documentation II 3 units
- ARCH 199 - Architecture Design Studio 4 units
- ART 101 - Art and Visual Culture: A Global Perspective 3 units
- ART 102A - History of Western Art - Prehistoric to Gothic 3 units
- ART 102B - History of Western Art - Proto-Renaissance to 19th Century 3 units
- ART 102C - History of Western Art - 19th Century to Contemporary Times 3 units
- ART 106 - Cross-Cultural Art 3 units
- ART 110 - Drawing Fundamentals I 3 units
- ART 130 - Two-Dimensional Design I 3 units
- ART 131 - Lettering and Typography I 3 units
- ART 141 - Digital Art Fundamentals 3 units
- ART 142 - Digital Imaging Fundamentals 3 units
- ART 143 - Digital Publishing Fundamentals 3 units
- ART 150 - The Art of Photography 3 units
- ART 160 - Three-Dimensional Design 3 units
- ART 161 - Beginning Ceramics 3 units
- ART 181 - Beginning Sculpture 3 units
- ART 205A - History of Asian Art - India and Southeast Asia 3 units
- ART 205B - History of Asian Art - China, Korea, and Japan 3 units
- ART 207 - Art History of Mexico and Central and South America 3 units
- ART 209 - History of African Art 3 units
- ART 210 - Drawing Fundamentals II 3 units
- ART 217 - Life Drawing I 3 units
- ART 218 - Life Drawing II 3 units
- ART 219 - Watercolor Painting I 3 units
- ART 222 - Fundamentals of Painting I 3 units
- ART 223A - Fundamentals of Painting II 3 units
- ART 282 - Life Sculpture 3 units
- DANC 101 - Dance Appreciation 3 units
- DANC 103 - History of Dance in the 20th Century 3 units
- DANC 105 - Music for Dance 2 units
- DANC 120A - Beginning Ballet A 2 units
- DANC 130A - Beginning Modern Dance A 2 units
- DANC 140 - Jazz Dance I 2 units
- DANC 220A - Intermediate Ballet A 2 units
- DANC 230A - Intermediate Modern Dance A 2 units
- DANC 240 - Jazz Dance II 2 units
- ENGL 24A - Creative Writing: Introduction to Poetry 3 units
- ENGL 25A - Creative Writing: Introduction to the Craft of Fiction 3 units
- ENGL 78 - Creative Writing: Screenwriting 3 units
- FILM 110 - Film Appreciation 3 units
- FILM 113 - Screenplay Analysis 3 units
- FILM 114 - Story Development 3 units
- FILM 120 - Introduction to Film/Video Production 3 units
- FILM 121 - Audio Production 3 units
- FILM 122 - Production I 3 units
- FILM 153 - American Independent Cinema 3 units
- FILM 154 - Regional Cinemas 3 units
- FILM 232 - Production II 3 units
- MUSI 101 - Music Fundamentals 3 units

- MUSI 102A - Beginning Sightsinging 2 units
- MUSI 102B - Advanced Sightsinging 2 units
- MUSI 103A - Theory and Musicianship I 4 units
- MUSI 103B - Theory and Musicianship II 4 units
- MUSI 111 - Music Appreciation Survey 3 units
- MUSI 112 - Music Cultures of the World 3 units
- MUSI 113 - Survey of Jazz 3 units
- MUSI 116 - History of Rock Music 3 units
- MUSI 120 - Voice Class I 2 units
- MUSI 131A - Beginning Piano I 2 units
- MUSI 131B - Beginning Piano II 2 units
- MUSI 203 - Theory and Musicianship III 4 units
- MUSI 215A - Music History and Literature up to 1750 3 units
- MUSI 215B - Music History and Literature - 1750 to Present 3 units
- MUSI 220 - Voice Class II 2 units
- MUSI 231A - Intermediate Piano I 2 units
- MUSI 231B - Intermediate Piano II 2 units
- PHOT 101 - Elementary Photography 2 units
- PHOT 102 - Basic Photography 3 units
- PHOT 150 - The Art of Photography 3 units
- PHOT 202 - Intermediate Photography 4 units
- THEA 103 - Theatre Appreciation 3 units
- THEA 104 - Dramatic Literature 3 units
- THEA 113 - Introduction to Acting 3 units
- THEA 114 - Fundamentals of Acting 3 units
- THEA 184 - Stagecraft 3 units
- THEA 185 - Introduction to Stage Lighting 3 units
- THEA 188 - Fundamentals of Stage Makeup 3 units
- THEA 189 - Costuming for the Stage 3 units
- THEA 214A - Intermediate Acting 3 units

Total Units: 18

Note: ART 150 is the same course as PHOT 150. Course credit is limited to ART 150 or PHOT 150.

3. Area of Emphasis in Culture and Communication:

These courses will emphasize the study of communication, culture, and the skills needed to communicate effectively in oral, written, or visual forms. Students transferring to a four-year university will have a basic foundation for further studies in communication studies, media studies, journalism, English, or modern languages. This emphasis may be useful for students interested in possible career paths in broadcasting, public relations, advertising, journalism, interpreter, photography, technical writing, or radio and television.

Select 18 units from at least two disciplines.

- ANTH 4 - Language and Culture 3 units
- ART 143 - Digital Publishing Fundamentals 3 units
- CHIN 1 - Elementary Chinese I 4 units
- CHIN 2 - Elementary Chinese II 4 units
- CHIN 3 - Intermediate Chinese I 4 units
- CHIN 24 - Introduction to Chinese Language and Culture 3 units
- COMS 100 - Public Speaking 3 units
- COMS 120 - Argumentation and Debate 3 units
- COMS 130 - Interpersonal Communication 3 units
- COMS 140 - Small Group Communication 3 units
- COMS 250 - Oral Interpretation of Literature 3 units
- COMS 260 - Introduction to Intercultural Communication 3 units
- COMS 265 - Mass Communication 3 units
- COMS 270 - Organizational Communication 3 units
- ENGL 1B - Literature and Composition 3 units
- ENGL 1BH - Honors Literature and Composition 3 units
- ENGL 1C - Critical Thinking and Composition 3 units
- ENGL 1CH - Honors Critical Thinking and Composition 3 units
- ENGL 12 - Introduction to Fiction 3 units
- ENGL 15A - Survey of British Literature I 3 units
- ENGL 15B - Survey of British Literature II 3 units
- ENGL 20 - Shakespeare's Plays - Tragedies and Romances 3 units
- ENGL 21 - Shakespeare's Plays - Comedies and Histories 3 units

- ENGL 24A - Creative Writing: Introduction to Poetry 3 units
- ENGL 25A - Creative Writing: Introduction to the Craft of Fiction 3 units
- ENGL 27 - Children's Literature 3 units
- ENGL 28 - Images of Women in Literature 3 units
- ENGL 30 - The English Bible as Literature 3 units
- ENGL 31 - Mythology and Folklore 3 units
- ENGL 34 - The Short Story 3 units
- ENGL 35 - World Literature: 3500 BCE to 1650 CE 3 units
- ENGL 36 - World Literature: 1650 CE to Present 3 units
- ENGL 39 - Literature and Film 3 units
- ENGL 40A - American Literature I 3 units
- ENGL 40B - American Literature II 3 units
- ENGL 41B - Survey of Film: 1950 to the Present 3 units
- ENGL 42 - Chicano and Latino Literature 3 units
- ENGL 43 - African American Literature 3 units
- ENGL 44 - The Literature of American Ethnic Groups 3 units
- ENGL 78 - Creative Writing: Screenwriting 3 units
- FILM 120 - Introduction to Film/Video Production 3 units
- FILM 122 - Production I 3 units
- FILM 124 - Production Planning 3 units
- FILM 128 - Television Production 3 units
- FILM 153 - American Independent Cinema 3 units
- FILM 154 - Regional Cinemas 3 units
- FILM 232 - Production II 3 units
- FREN 1 - Elementary French I 4 units
- FREN 2 - Elementary French II 4 units
- FREN 3 - Intermediate French I 4 units
- FREN 4 - Intermediate French II 4 units
- FREN 5 - Advanced French I 3 units
- FREN 6 - Advanced French II 3 units
- GERM 1 - Elementary German I 4 units
- GERM 2 - Elementary German II 4 units
- ITAL 1 - Elementary Italian I 4 units
- ITAL 2 - Elementary Italian II 4 units
- ITAL 24 - Introduction to Italian Culture 3 units
- JAPA 1 - Elementary Japanese I 4 units
- JAPA 2 - Elementary Japanese II 4 units
- JAPA 3 - Intermediate Japanese I 4 units
- JAPA 4 - Intermediate Japanese II 4 units
- JAPA 25 - Cultural Aspects of the Japanese Language 3 units
- JOUR 1 - News Writing and Reporting 3 units
- JOUR 7ab - Advanced Photojournalism 2 units
- JOUR 12 - Mass Media and Society 3 units
- LIBR 1 - Introduction to Library Information Science 1 unit
- LIBR 10 - Library Research Using the Internet 1 unit
- PHOT 101 - Elementary Photography 2 units
- PHOT 102 - Basic Photography 3 units
- PHOT 206ab - Advanced Photojournalism 2 units
- SLAN 111 - American Sign Language I 4 units
- SLAN 112 - American Sign Language II 4 units
- SLAN 113 - American Sign Language III 4 units
- SLAN 114 - American Sign Language IV 4 units
- SLAN 115 - American Sign Language V 4 units
- SLAN 130 - Deaf Culture 3 units
- SPAN 1 - Elementary Spanish I 4 units
- SPAN 2 - Elementary Spanish II 4 units
- SPAN 3 - Intermediate Spanish I 4 units
- SPAN 4 - Intermediate Spanish II 4 units
- SPAN 5 - Advanced Spanish I 3 units
- SPAN 6 - Advanced Spanish II 3 units
- SPAN 52A - Spanish for Native Speakers I 4 units
- SPAN 52B - Spanish for Native Speakers II 4 units

Total Units: 18

Note: JOUR 7ab is the same course as PHOT 206ab. Course credit is limited to JOUR 7ab or PHOT 206ab.

4. Area of Emphasis in Social and Behavioral Sciences:

These courses emphasize an appreciation and understanding of how members of diverse societies operate or have operated as individuals and social groups. Courses in the social and behavioral sciences will help students to develop an awareness of methods of inquiry and stimulate critical thinking about the ways in which people act and interact within social and cultural contexts. Students will study the perspectives, concepts, principles, theories, and methodologies of disciplines within social and behavioral sciences. Students transferring to a four-year university will have a basic foundation for further studies in areas such as American studies, anthropology, criminal justice, child development, economics, geography, history, political science, psychology, or sociology. This emphasis may be useful for students interested in possible career paths in education, history, social work, public administration, public service agencies, library science, economics, or social policy.

Select 18 units from at least two disciplines.

- AJ 100 - Introduction to Administration of Justice 3 units
- AJ 103 - Concepts of Criminal Law I 3 units
- AJ 107 - Crime and Control - An Introduction to Corrections 3 units
- AJ 111 - Criminal Investigation 3 units
- AJ 115 - Community and Human Relations 3 units
- ASTU 7 - History of American Popular Culture 3 units
- ANTH 2 - Introduction to Cultural Anthropology 3 units
- ANTH 3 - Introduction to Archaeology 3 units
- ANTH 4 - Language and Culture 3 units
- ANTH 6 - Native Peoples of North America 3 units
- ANTH 7 - Native Peoples of South America 3 units
- ANTH 8 - Ancient Civilizations of Mesoamerica 3 units
- ANTH 9 - Women, Culture, and Society 3 units
- ANTH 11 - Anthropology of Religion, Magic and Witchcraft 3 units
- CDEV 103 - Child Growth and Development 3 units
- CDEV 104 - The Home, The School, The Community 3 units
- COMS 260 - Introduction to Intercultural Communication 3 units
- COMS 265 - Mass Communication 3 units
- ECON 5 - Fundamentals of Economics 3 units
- ECON 1 - Principles of Economics: Macroeconomics 3 units
- ECON 2 - Principles of Economics: Microeconomics Theory 3 units
- EDUC 201 - Foundations in Education 3 units
- ESTU 1 - Introduction to Ethnic Studies 3 units
- ESTU 3 - The Chicano in Contemporary United States Society 3 units
- ESTU 5 - Chicano Culture 3 units
- GEOG 2 - Cultural Geography 3 units
- GEOG 5 - World Regional Geography 3 units
- GEOG 7 - Geography of California 3 units
- HIST 101 - United States History to 1877 3 units
- HIST 102 - United States History from 1877 to the Present 3 units
- HIST 105 - Women and American History from the Colonial Era to 1877 3 units
- HIST 106 - Women and American History from 1877 to the Present 3 units
- HIST 108 - United States History: The American Indian Experience 3 units
- HIST 110 - The African American in the United States to 1877 3 units
- HIST 111 - The African American in the United States from 1877 to the Present 3 units
- HIST 112 - History of the Chicano in the United States 3 units
- HIST 122 - United States Social History: Cultural Pluralism in America 3 units
- HIST 128 - History of California 3 units
- HIST 129 - History of Los Angeles 3 units
- HIST 140 - History of Early Civilizations 3 units
- HIST 141 - History of Modern Civilizations 3 units
- HIST 143 - Twentieth Century World History 3 units
- HIST 152 - History of Latin America through Independence 3 units
- HIST 154 - A History of Mexico 3 units
- JOUR 12 - Mass Media and Society 3 units
- PE 275 - Sport Psychology 3 units
- PHIL 117 - Political Philosophy 3 units
- POLI 1 - Governments of the United States and California 3 units
- POLI 2 - Introduction to Comparative Politics 3 units
- POLI 3 - Introduction to Principles and Methods of Political Science 3 units

- POLI 5 - Ethnicity in the American Political Process 3 units
- POLI 6 - Civil Rights and Liberties in the United States 3 units
- POLI 7 - Political Philosophy 3 units
- POLI 10 - Introduction to International Relations 3 units
- PSYC 2 - Psychology for Effective Living 3 units
- PSYC 3 - Critical Thinking and Psychology 3 units
- PSYC 5 - General Psychology 3 units
- PSYC 7 - Physiological Psychology 3 units
- PSYC 8 - Social Psychology 3 units
- PSYC 9A - Introduction to Statistics and Data Analysis for the Behavioral Sciences 4 units
- PSYC 9B - Research Methods in the Behavioral Sciences 4 units
- PSYC 10 - African American Psychology 3 units
- PSYC 12 - Human Sexuality 3 units
- PSYC 15 - Abnormal Psychology 3 units
- PSYC 16 - Lifespan Development 3 units
- PSYC 17 - Cultural Psychology 3 units
- SLAN 130 - Deaf Culture 3 units
- SOCI 101 - Introduction to Sociology 3 units
- SOCI 102 - The Family 3 units
- SOCI 104 - Social Problems 3 units
- SOCI 107 - Issues of Race and Ethnicity in the United States 3 units
- SOCI 108 - Global Perspectives on Race and Ethnicity 3 units
- SOCI 109A - Introduction to Statistics and Data Analysis for the Behavioral Sciences 4 units
- SOCI 112 - Introduction to Criminology 3 units
- WSTU 1 - Introduction to Women's Studies 3 units

Total Units: 18

Note: POLI 7 is the same course as PHIL 117. Course credit is limited to POLI 7 or PHIL 117.

5. Area of Emphasis in Biological and Physical Sciences:

These courses emphasize the physical universe, its life forms, and its natural phenomena. Courses in the sciences will help students develop an understanding of the scientific method and the relationship between science and other human activities. Students transferring to a four-year university will have a basic foundation for further studies in areas such as biology (biochemistry, biophysics, molecular and cell biology, marine biology, microbiology), chemistry, physical and earth sciences (astronomy, geology, physical geography, oceanography), or physics. This emphasis may be useful for students interested in possible career paths in life sciences, physiology, exercise science, physical sciences, or earth sciences.

Select 18 units with at least one course in Biological Sciences and one course in Physical Sciences.

Biological Sciences:

- ANAT 30 - Essentials of Anatomy and Physiology 4 units
- ANAT 32 - General Human Anatomy 4 units
- APHY 34A - Anatomy and Physiology I 4 units
- APHY 34B - Anatomy and Physiology II 4 units
- ANTH 1 - Introduction to Physical Anthropology 3 units
- ANTH 5 - Physical Anthropology Laboratory 1 unit
- BIOL 8 - Biology of Plants 4 units

- BIOL 10 - Fundamentals of Biology 4 units
or
- BIOL 10H - Honors Fundamentals of Biology 4 units

- BIOL 11 - Fundamentals of Zoology 4 units
- BIOL 12 - Field Zoology 4 units
- BIOL 15 - Environmental Aspects of Biology 3 units
- BIOL 16 - Field Entomology 4 units
- BIOL 17 - Marine Biology 3 units
- BIOL 18 - Marine Biology Laboratory 1 unit
- BIOL 101 - Principles of Biology I 5 units
- BIOL 102 - Principles of Biology II 5 units
- BIOL 103 - Fundamentals of Molecular Biology 3 units
- MICR 33 - General Microbiology 5 units
- PHYO 31 - Human Physiology 4 units
- PSYC 7 - Physiological Psychology 3 units

Physical Science:

- ASTR 12 - Astronomy Laboratory 1 unit
- ASTR 20 - The Solar System 3 units
or
- ASTR 20H - Honors The Solar System 3 units
- ASTR 25 - Stars and Galaxies 3 units
- CHEM 1A - General Chemistry I 5 units
- CHEM 1B - General Chemistry II 5 units
- CHEM 4 - Beginning Chemistry 5 units
- CHEM 7A - Organic Chemistry I 5 units
- CHEM 7B - Organic Chemistry II 5 units
- CHEM 20 - Fundamentals of Chemistry 5 units
- CHEM 21A - Survey of General and Organic Chemistry 4 units
- CHEM 21B - Survey of Organic and Biochemistry 4 units
- GEOG 1 - Physical Geography 3 units
- GEOG 6 - Physical Geography Laboratory 1 unit
- GEOG 9 - Weather and Climate 3 units
- GEOL 1 - Physical Geology 3 units
- GEOL 2 - History of Planet Earth 3 units
- GEOL 3 - Physical Geology Laboratory 1 unit
- GEOL 4 - History of Planet Earth Laboratory 1 unit
- GEOL 6 - Earth Science in Education 4 units
- GEOL 15 - Natural Disasters 3 units
- GEOL 30 - Geology Laboratory of Death Valley 1 unit
- GEOL 32 - Geology Laboratory of Owens Valley and Sierra Nevada 1 unit
- GEOL 34 - Geology Laboratory of Southeastern California 1 unit
- GEOL 36 - Geology Laboratory of Coastal California 1 unit
- OCEA 10 - Introduction to Oceanography 4 units
or
- OCEA 10H - Honors Introduction to Oceanography 4 units
- PHYS 1A - Mechanics of Solids 4 units
- PHYS 1B - Fluids, Heat and Sound 3 units
- PHYS 1C - Electricity and Magnetism 4 units
- PHYS 1D - Optics and Modern Physics 4 units
- PHYS 2A - General Physics 4 units
- PHYS 2B - General Physics 4 units
- PHYS 3A - General Physics with Calculus 5 units
- PHYS 3B - General Physics with Calculus 5 units
- PHYS 11 - Descriptive Introduction to Physics 3 units
- PHYS 12 - Laboratory for Introductory Physics 1 unit
- PSCI 25 - Exploring Physical Sciences 3 units

Total Units: 18

6. Area of Emphasis in Kinesiology and Wellness:

These courses emphasize lifelong understanding and the development of a student's physiological, psychological, and social well-being. Students transferring to a four-year university will have a basic foundation for further studies in areas such as physical education, recreation, nutrition, or allied health fields. This emphasis may be useful for students interested in possible career paths in athletic training, personal training, management, exercise science, sports nutrition, and education.

Select a total of 18 units from the following disciplines:

Physical Education: minimum 6 units

- PE 217 - Sports Officiating 2 units
- PE 270 - Fitness and Sports Nutrition 3 units
- PE 272 - Care and Prevention of Athletic Injuries 3 units
- PE 275 - Sport Psychology 3 units
- PE 277 - Introduction to Kinesiology 3 units
- PE 280 - Exercise and Nutrition Programs for Fitness and Weight Management 3 units
- PE 290 - Personal Fitness Trainer 3 units

Science and Nutrition: minimum 3 units

- ANAT 30 - Essentials of Anatomy and Physiology 4 units
- ANAT 32 - General Human Anatomy 4 units
- APHY 34A - Anatomy and Physiology I 4 units
- APHY 34B - Anatomy and Physiology II 4 units

- BIOL 10 - Fundamentals of Biology 4 units
or
- BIOL 10H - Honors Fundamentals of Biology 4 units

- BIOL 101 - Principles of Biology I 5 units
- BIOL 102 - Principles of Biology II 5 units
- CHEM 1A - General Chemistry I 5 units
- CHEM 4 - Beginning Chemistry 5 units
- CHEM 20 - Fundamentals of Chemistry 5 units
- CHEM 21A - Survey of General and Organic Chemistry 4 units
- CHEM 21B - Survey of Organic and Biochemistry 4 units
- MICR 33 - General Microbiology 5 units
- NFOO 11 - Nutrition 3 units
- PHYS 2A - General Physics 4 units
- PHYS 2B - General Physics 4 units
- PHYS 11 - Descriptive Introduction to Physics 3 units
- PHYO 31 - Human Physiology 4 units

Social Sciences and Development: minimum 3 units

- CH 1 - Personal and Community Health Issues 3 units
- HDEV 110 - Strategies for Creating Success in College and in Life 3 units
- PSYC 5 - General Psychology 3 units
- SOCI 101 - Introduction to Sociology 3 units

Elective Courses:

- FAID 1 - First Aid, Cardiopulmonary Resuscitation (CPR) and Basic Emergency Care 3 units
- NFOO 15 - Nutrition for Infants and Young Children 3 units
- PSYC 2 - Psychology for Effective Living 3 units
- PSYC 12 - Human Sexuality 3 units
- PSYC 16 - Lifespan Development 3 units

Total Units: 18

History, AA

Behavioral and Social Sciences Division

www.elcamino.edu/academics/behavioralsocial

The degree provides students with a foundation in the science of historical inquiry. After completing the program requirements, students will gain an understanding of the methodologies and schools of interpretation utilized by historians to study the past. Students will also demonstrate knowledge of the primary cultural, economic, intellectual, political, social, and diplomatic institutions of the United States and the world. Competencies will be assessed through the evaluation of student term papers and projects, essays, and regularly scheduled examinations.

Required Core: 12 units

- HIST 101 - United States History to 1877 3 units
or
- HIST 101H - Honors United States History to 1877 3 units

- HIST 102 - United States History from 1877 to the Present 3 units
or
- HIST 102H - Honors United States History from 1877 to the Present 3 units

- HIST 140 - History of Early Civilizations 3 units
- HIST 141 - History of Modern Civilizations 3 units

9 units from:

- ASTU 7 - History of American Popular Culture 3 units
- HIST 105 - Women and American History from the Colonial Era to 1877 3 units
- HIST 106 - Women and American History from 1877 to the Present 3 units
- HIST 108 - United States History: The American Indian Experience 3 units
- HIST 110 - The African American in the United States to 1877 3 units

- HIST 111 - The African American in the United States from 1877 to the Present 3 units
- HIST 112 - History of the Chicano in the United States 3 units
- HIST 114 - History of the Asian American in the United States 3 units

- HIST 122 - United States Social History: Cultural Pluralism in America 3 units
or
- HIST 122H - Honors United States Social History: Cultural Pluralism in America 3 units

- HIST 128 - History of California 3 units
- HIST 129 - History of Los Angeles 3 units
- HIST 152 - History of Latin America through Independence 3 units
- HIST 154 - A History of Mexico 3 units

Total Units: 21

Preparation for the History Transfer Major

For information on specific university major requirements, please obtain a transfer curriculum guide sheet in the Counseling Services Center, consult with your counselor, or visit the Transfer Center. You may use the transfer major requirements to help you fulfill your associate degree requirements.

Japanese, AA

Humanities Division

www.elcamino.edu/academics/humanities

By completing the degree requirements, the student will acquire proficiency in speaking, reading, writing, and understanding Japanese and will gain knowledge of Japanese culture. The student will be able to communicate in Japanese, write formal compositions, and read the texts of Japanese authors, all at the intermediate-mid level of competency. Competencies will be assessed throughout the language sequence with written and oral exams. This major provides career opportunities where knowledge of Japanese is useful and prepares students for continued learning of Japanese. The student who has completed two or more years of Japanese in high school will have the opportunity to enroll with advanced standing.

At least 50 percent of the courses required for the Japanese major must be completed at El Camino College. Japanese 4 must be completed at El Camino College.

Required Core: 4 units

- JAPA 4 - Intermediate Japanese II 4 units

4-11 units from:

- JAPA 1 - Elementary Japanese I 4 units
- JAPA 2 - Elementary Japanese II 4 units
- JAPA 3 - Intermediate Japanese I 4 units
- JAPA 21 - Beginning Conversational Japanese 2 units
- JAPA 22 - Intermediate Conversational Japanese 2 units

a minimum of 3 units from:

- ANTH 2 - Introduction to Cultural Anthropology 3 units
- ART 205B - History of Asian Art - China, Korea, and Japan 3 units
- ENGL 35 - World Literature: 3500 BCE to 1650 CE 3 units
- ENGL 36 - World Literature: 1650 CE to Present 3 units
- JAPA 25 - Cultural Aspects of the Japanese Language 3 units
- PHIL 107 - Philosophy of Religion 3 units
- POLI 2 - Introduction to Comparative Politics 3 units
- POLI 10 - Introduction to International Relations 3 units

Total Units: 18

Preparation for the Japanese Transfer Major

For information on specific university major requirements, please obtain a transfer curriculum guide sheet in the Counseling Services Center, consult with your counselor, or visit the Transfer Center. You may use the transfer major requirements to help you fulfill your associate degree requirements.

Journalism, AA

Humanities Division

www.elcamino.edu/academics/humanities

The journalism program prepares the student to acquire proficiency in traditional and electronic news gathering techniques and in analyzing and evaluating information. The student will be able to write a variety of publishable stories for electronic and print journalism and to apply principles of editing and publication design. Competencies will be assessed regularly by performance in the college newspaper's print and web editions and its magazine, as well as by participation in state and national competitions. The major prepares the student to transfer and major in journalism, mass communications, public relations or advertising and provides career opportunities in electronic journalism and in newspaper, magazine, advertising, public relations, and radio/television work.

At least 15 units required for the major must be completed at El Camino College.

For Gainful Employment program information, please visit www.elcamino.edu/academics/humanities/journalism.

Required Core: 21 units

- JOUR 1 - News Writing and Reporting 3 units
- JOUR 8 - Advanced Reporting and News Editing 3 units

- JOUR 6 - Basic Photojournalism 3 units
or
- PHOT 106 - Basic Photojournalism 3 units

- JOUR 9abcd - Magazine Editing and Production 3 units *
- JOUR 11abcd - Newspaper Publication 3 units *
- JOUR 12 - Mass Media and Society 3 units
- JOUR 14abcd - Multimedia Journalism 3 units *

2-3 units from:

- JOUR 7ab - Advanced Photojournalism 2 units *
or
- PHOT 206ab - Advanced Photojournalism 2 units *

- ECON 1 - Principles of Economics: Macroeconomics 3 units
- POLI 5 - Ethnicity in the American Political Process 3 units

Total Units: 23-24

*Note: one semester each of JOUR 7ab, JOUR 9abcd, JOUR 11abcd, JOUR 14abcd, and PHOT 206ab may be counted for the major.

Note: JOUR 6 is the same course as PHOT 106. Course credit is limited to JOUR 6 or PHOT 106.

Preparation for the Journalism Transfer Major

For information on specific university major requirements, please obtain a transfer curriculum guide sheet in the Counseling Services Center, consult with your counselor, or visit the Transfer Center. You may use the transfer major requirements to help you fulfill your associate degree requirements.

Liberal Studies (Elementary Teaching), AA

Behavioral and Social Sciences Division

www.elcamino.edu/academics/behavioralsocial

This degree is designed for students who wish to earn a multiple-subject teaching credential authorizing them to teach in grades K-5. Students will study a broad range of subjects to prepare them for teaching, including English, mathematics, science, social science, visual and performing arts, and human development. Competencies will be assessed regularly through projects, examinations, laboratory experiments, and presentations. Program assessment will be conducted by tracking student placement in teacher preparation programs at the university level.

General Information

Majoring in Liberal Studies will afford students the opportunity to complete the first two years of lower division coursework for their intended transfer institution and, depending upon the program selected, up to 45 hours of the required fieldwork for the credential.

Transfer Degree Option:

Students must complete the requirements listed on the guide sheet for a transfer institution.

Teacher Preparation Option:

Required Core: 16 units

- ENGL 1A - Reading and Composition 4 units
or
- ENGL 1AH - Honors Reading and Composition 4 units
and
- COMS 100 - Public Speaking 3 units
or
- ENGL 1C - Critical Thinking and Composition 3 units
or
- ENGL 1CH - Honors Critical Thinking and Composition 3 units
and
- HIST 101 - United States History to 1877 3 units
or
- HIST 102 - United States History from 1877 to the Present 3 units

- POLI 1 - Governments of the United States and California 3 units
and
- GEOG 5 - World Regional Geography 3 units
or
- CDEV 103 - Child Growth and Development 3 units
or
- HIST 140 - History of Early Civilizations 3 units

3-4 units from:

- BIOL 10 - Fundamentals of Biology 4 units
or
- BIOL 10H - Honors Fundamentals of Biology 4 units

- GEOL 6 - Earth Science in Education 4 units
- PSCI 25 - Exploring Physical Sciences 3 units

3 units from:

- ART 101 - Art and Visual Culture: A Global Perspective 3 units
- DANC 101 - Dance Appreciation 3 units
- ENGL 15A - Survey of British Literature I 3 units
- ENGL 15B - Survey of British Literature II 3 units
- ENGL 35 - World Literature: 3500 BCE to 1650 CE 3 units
- ENGL 36 - World Literature: 1650 CE to Present 3 units
- ENGL 40A - American Literature I 3 units
- ENGL 40B - American Literature II 3 units
- ENGL 42 - Chicano and Latino Literature 3 units
- ENGL 43 - African American Literature 3 units
- ENGL 44 - The Literature of American Ethnic Groups 3 units
- MUSI 111 - Music Appreciation Survey 3 units
- MUSI 112 - Music Cultures of the World 3 units
- THEA 103 - Theatre Appreciation 3 units

3-5 units from:

- MATH 73 - Intermediate Algebra for General Education 5 units
- MATH 80 - Intermediate Algebra for Science, Technology, Engineering, and Mathematics 5 units
- MATH 110 - Structures and Concepts in Mathematics 3 units
- MATH 115 - Probability and Statistics for Prospective Elementary School Teachers 3 units
- MATH 120 - Nature of Mathematics 3 units
- MATH 130 - College Algebra 3 units
- MATH 150 - Elementary Statistics with Probability 4 units
- MATH 170 - Trigonometry 3 units

Total Units: 25-28

For information on specific university requirements and teaching careers, please contact the Teacher Education Preparation (TEP) Program at 310-660-3573.

Music, AA

Fine Arts Division

www.elcamino.edu/academics/finearts

The music program provides students with a comprehensive foundation in music theory, history, and performance. This is achieved through a structured program of training in a variety of solo performance media, ensembles, music theory, keyboard skills, music history, and music technology. The program prepares students for transfer and further study of music education, music business, audio for film/video production, songwriting, and music production. Students will demonstrate proficiency by analyzing, writing, interpreting, and performing pieces of music, and by demonstrating skills utilizing professional music software. Program assessment is measured by juried and public performances, program completion, transferability, student learning outcomes, and periodic program review.

Required Core: 20 units

- MUSI 103A - Theory and Musicianship I 4 units
- MUSI 103B - Theory and Musicianship II 4 units
- MUSI 131A - Beginning Piano I 2 units
- MUSI 190A - Applied Music I/Individual Lessons 1 unit
- MUSI 190B - Applied Music II 1 unit
- MUSI 190C - Applied Music III 1 unit
- MUSI 190D - Applied Music IV 1 unit
- MUSI 215A - Music History and Literature up to 1750 3 units
- MUSI 215B - Music History and Literature - 1750 to Present 3 units

Note:

Four semesters of Applied Music is required for music majors.

Each music student is required to choose an area to fulfill 30 units of the degree.

Vocal:

select 10 units

6 units from:

- MUSI 102A - Beginning Sightsinging 2 units
- MUSI 120 - Voice Class I 2 units
- MUSI 220 - Voice Class II 2 units

4 units from:

- MUSI 102B - Advanced Sightsinging 2 units
- MUSI 221 - Introduction to Lyric Diction for Singers 2 units
- MUSI 222abcd - Opera Workshop 2 units

Keyboard:

select 10 units

- MUSI 131B - Beginning Piano II 2 units
- MUSI 203 - Theory and Musicianship III 4 units
- MUSI 231A - Intermediate Piano I 2 units
- MUSI 231B - Intermediate Piano II 2 units
- MUSI 232 - Advanced Piano 2 units

Instrumental Music:

select 10 units

4 units from:

- MUSI 203 - Theory and Musicianship III 4 units

4 units from:

- MUSI 260abcd - Woodwind Ensembles 1 unit **
- MUSI 261abcd - Brass Ensembles 1 unit **
- MUSI 262abcd - Percussion Ensembles 1 unit **
- MUSI 264abcd - String Ensembles 1 unit
- MUSI 269ABCD - Guitar Ensembles 1 unit

2 units from:

- MUSI 102A - Beginning Sightsinging 2 units
or
- MUSI 102B - Advanced Sightsinging 2 units
- MUSI 143 - Beginning Woodwind Instruments 2 units

- MUSI 144 - Beginning Brass Instruments 2 units
- MUSI 145 - Beginning Percussion Instruments 2 units
- MUSI 146 - Beginning String Instruments 2 units
- MUSI 147A - Beginning Guitar 2 units
- MUSI 147B - Beginning Guitar II 2 units
- MUSI 247 - Intermediate Guitar 2 units

Commercial Music:

select 10 units

5 units from:

- MUSI 105 - Commercial/Jazz Theory and Musicianship 3 units
- MUSI 130 - Beginning Jazz Improvisation 2 units

2 units from:

- MUSI 147A - Beginning Guitar 2 units
- MUSI 147B - Beginning Guitar II 2 units
- MUSI 247 - Intermediate Guitar 2 units

3 units from:

- MUSI 113 - Survey of Jazz 3 units
- MUSI 116 - History of Rock Music 3 units
- MUSI 117 - Music of the Beatles 3 units

General Music:

select 10 units

4 units from:

- MUSI 120 - Voice Class I 2 units
- MUSI 147A - Beginning Guitar 2 units
- MUSI 147B - Beginning Guitar II 2 units

6 units from:

- MUSI 102A - Beginning Sightsinging 2 units
or
- MUSI 102B - Advanced Sightsinging 2 units
- MUSI 112 - Music Cultures of the World 3 units
or
- MUSI 112H - Honors Music Cultures of the World 3 units
- MUSI 116 - History of Rock Music 3 units
- MUSI 117 - Music of the Beatles 3 units
- MUSI 203 - Theory and Musicianship III 4 units

Total Units: 30

**Note: one semester each of MUSI 260abcd, MUSI 261abcd, and MUSI 262abcd may be counted for credit toward the major.

Preparation for the Music Transfer Major

For information on specific university major requirements, please obtain a transfer curriculum guide sheet in the Counseling Services Center, consult with your counselor, or visit the Transfer Center. You may use the transfer major requirements to help you fulfill your associate degree requirements.

Paralegal Studies, AA

Business Division

www.elcamino.edu/academics/business

The paralegal studies program is designed to train students to assist lawyers in private firms, legal departments of companies, or governmental agencies. Upon successful completion of the program requirements, the student will have the ability to apply theories and principles of law to prepare and interpret legal documents, draft pleadings including court forms, prepare for litigation, and apply legal ethics and case management techniques in a legal environment. Students will also develop skills for client interaction and legal research, including on-line legal research. Competency will be assessed regularly by examinations and assignments. This program is approved by the American Bar Association.

General Information

This program does not prepare students for law school or the practice of law. "No person shall practice law in this state unless he/she is an active member of the State Bar." Cal. Bus. & Prof. Code, § 6125.

Program Prerequisite

Entrance to the program is gained by successful completion of LAW 11, Introduction to Legal Research.

Major Requirements

The American Bar Association has specific course requirements for 18 units of general education. All students in this program must consult a counselor for courses that satisfy the 18 units of general education.

For Gainful Employment program information, please visit www.elcamino.edu/academics/business/paralegal.

Required Core: 21-22 units

- PARA 1 - Introduction to Paralegal Studies 3 units
- LAW 4 - Legal Environment of Business 4 units
or
- LAW 5 - Business Law 3 units
- LAW 11 - Introduction to Legal Research 3 units
- LAW 16 - Civil Procedure 3 units
- LAW 17 - Legal Research and Writing 3 units
- LAW 19 - Introduction to Legal Technology 3 units
- LAW 20 - Paralegal Seminar 3 units

12-13 units from:

- LAW 12 - Probate Procedures 3 units
- LAW 13 - Family Law 3 units
- LAW 14 - Tort Law 3 units
- LAW 15 - Civil and Criminal Evidence 3 units
- LAW 18 - Wills, Trusts and Estate Planning 3 units
- LAW 95 - Cooperative Work Experience Education 2-4 units
- RE 12A - Legal Aspects of Real Estate 3 units

Total Units: 33-35

In-Residence Requirements

A total of 15 units of Legal Specialty courses including:

- LAW 11 - Introduction to Legal Research 3 units
- LAW 17 - Legal Research and Writing 3 units
- LAW 20 - Paralegal Seminar 3 units

And six additional units selected from:

- LAW 12 - Probate Procedures 3 units
- LAW 13 - Family Law 3 units
- LAW 14 - Tort Law 3 units
- LAW 15 - Civil and Criminal Evidence 3 units
- LAW 16 - Civil Procedure 3 units
- LAW 18 - Wills, Trusts and Estate Planning 3 units
- LAW 19 - Introduction to Legal Technology 3 units

must be taken at El Camino College for the degree.

Philosophy, AA

Behavioral and Social Sciences Division

www.elcamino.edu/academics/behavioralsocial

The degree provides students with a foundation in philosophical inquiry. Upon successful completion, students will understand the major concepts and issues that have shaped philosophical traditions. This will include the ability to critically analyze contemporary social and moral issues and to assess the influential positions on theories of truth and the nature of reality. The student will also be able to analyze the logical structure of arguments and the rules of critical reasoning in their own and others' writing and thinking. Competencies will be assessed regularly through examinations, projects, and written reports. This major prepares students to pursue careers in education, law, health, and other fields where analytical skills are required.

Required Core: 6 units

- PHIL 106 - Introduction to Symbolic Logic 3 units
- PHIL 101 - Introduction to Philosophy 3 units
or
- PHIL 101H - Honors Introduction to Philosophy 3 units
or

- PHIL 103 - Ethics and Society 3 units

6 units from:

- PHIL 111 - History of Ancient and Medieval Philosophy 3 units
- PHIL 112 - History of Modern Philosophy 3 units
- PHIL 113 - Contemporary Philosophy 3 units

6 units from:

- HIST 140 - History of Early Civilizations 3 units
- HIST 141 - History of Modern Civilizations 3 units

- PHIL 105 - Critical Thinking and Discourse 3 units
or
- PHIL 105H - Honors Critical Thinking and Discourse 3 units

- PHIL 107 - Philosophy of Religion 3 units
- PHIL 114 - Asian Philosophy 3 units
- PHIL 115 - Existentialism 3 units

- PHIL 117 - Political Philosophy 3 units
or
- POLI 7 - Political Philosophy 3 units

Total Units: 18

Note: PHIL 117 is the same course as POLI 7.

Preparation for the Philosophy Transfer Major

For information on specific university major requirements, please obtain a transfer curriculum guide sheet in the Counseling Services Center, consult with your counselor, or visit the Transfer Center. You may use the transfer major requirements to help you fulfill your associate degree requirements.

Physical Education, AA

Health Sciences and Athletics Division

www.elcamino.edu/academics/healthsciences

The degree provides an orientation to the profession through participation in diverse physical activities and study of the dimensions of exercise. Students will acquire the ability to utilize principles of human anatomy, physiology, and behavioral processes in a variety of exercise and sport applications. Competencies will be assessed by a student's ability to solve problems in exercise program design and to evaluate movement skills, tactics, and strategies in various physical activities. Upon completion of the program, students will enhance their ability to pursue advanced degree options or entry-level positions in the discipline.

Required Core: 16 units

- ANAT 30 - Essentials of Anatomy and Physiology 4 units

- PSYC 5 - General Psychology 3 units
or
- PSYC 5H - Honors General Psychology 3 units

- PE 277 - Introduction to Kinesiology 3 units
- PE 280 - Exercise and Nutrition Programs for Fitness and Weight Management 3 units
- FAID 1 - First Aid, Cardiopulmonary Resuscitation (CPR) and Basic Emergency Care 3 units

Aquatics:

Plus 4 units of activity-units distributed over a minimum of 3 categories to include: Aquatics, Combatives, Dance, Fitness, Individual/Dual Activities, Intercollegiate Sports, and Team Activities

- PE 240A - Beginning Swimming 1 unit
- PE 240B - Intermediate Swimming 1 unit
- PE 240C - Advanced Swimming 1 unit
- PE 247 - Swimming, Lifeguard Training 2 units
- PE 248 - Swimming, Water Safety Instructor 2 units
- PE 249 - Swimming for Fitness 1 unit
- PE 250 - Techniques of Surfboard Riding 1 unit
- PE 402 - Adapted Swimming and Hydroexercise 1 unit

Combatives:

Plus 4 units of activity-units distributed over a minimum of 3 categories to include: Aquatics, Combatives, Dance, Fitness, Individual/Dual Activities, Intercollegiate Sports, and Team Activities

- PE 18A - Beginning Boxing 1 unit
- PE 220 - Naginata: A Japanese Martial Art 1 unit
- PE 221 - Combative Arts and Self Defense 1 unit

Dance:

Plus 4 units of activity-units distributed over a minimum of 3 categories to include: Aquatics, Combatives, Dance, Fitness, Individual/Dual Activities, Intercollegiate Sports, and Team Activities

- DANC 110 - Beginning Dance 2 units
- DANC 120A - Beginning Ballet A 2 units
- DANC 120B - Beginning Ballet B 2 units
- DANC 130A - Beginning Modern Dance A 2 units
- DANC 130B - Beginning Modern Dance B 2 units
- DANC 140 - Jazz Dance I 2 units
- DANC 161 - Tap Dance I - Beginning 1 unit
- DANC 162 - Hip Hop Dance 2 units
- DANC 164 - World Dance 1 unit
- DANC 165 - African Dance 1 unit
- DANC 167 - Social and Ballroom Dance 1 unit
- DANC 168 - Latin Social Dance 2 units
- DANC 220A - Intermediate Ballet A 2 units
- DANC 230A - Intermediate Modern Dance A 2 units
- DANC 240 - Jazz Dance II 2 units
- DANC 250 - Pilates Mat Class 3 units
- DANC 261 - Tap Dance II - Intermediate 2 units
- DANC 262 - Commercial Dance 2 units
- DANC 265 - Intermediate African Dance 2 units
- DANC 268 - Intermediate Latin Social Dance 2 units

Fitness:

Plus 4 units of activity-units distributed over a minimum of 3 categories to include: Aquatics, Combatives, Dance, Fitness, Individual/Dual Activities, Intercollegiate Sports, and Team Activities

- PE 2 - Walking for Fitness 1 unit
- PE 10A - Body Conditioning and Physical Fitness 1 unit
- PE 54 - Weight Training 1 unit
- PE 135abcd - Sport-Specific, Periodized Training for Athletes 1 unit
- PE 245 - Water Aerobics 1 unit
- PE 254 - Cardio Fitness and Body Sculpting 1 unit
- PE 257 - Yoga for Health and Fitness 1 unit
- PE 258 - Power Vinyasa Yoga 1 unit
- PE 259 - Circuit Training 1 unit
- PE 260 - Basic Principles of Fitness and Weight Control 1 unit
- PE 400 - Adapted Fitness 1 unit
- PE 401 - Adapted Strength Training 1 unit
- PE 404 - Adapted Cardiovascular Fitness 1 unit
- PE 409 - Adapted Yoga 1 unit

Individual/Dual Activities:

Plus 4 units of activity-units distributed over a minimum of 3 categories to include: Aquatics, Combatives, Dance, Fitness, Individual/Dual Activities, Intercollegiate Sports, and Team Activities

- PE 47 - Introduction to Indoor Rock Climbing 1 unit
- PE 204 - Badminton 1 unit
- PE 208 - Bowling 1 unit
- PE 224 - Golf 1 unit
- PE 251A - Beginning Tennis 1 unit

Intercollegiate Sports:

Plus 4 units of activity-units distributed over a minimum of 3 categories to include: Aquatics, Combatives, Dance, Fitness, Individual/Dual Activities, Intercollegiate Sports, and Team Activities

- PE 5abc - Men's Intercollegiate Baseball Team 3 units
- PE 6abc - Off-Season Training For Men's Intercollegiate Baseball Team 1 unit
- PE 15abc - Men's Intercollegiate Basketball Team 3 units

- PE 16abc - Off-Season Training for Men's Intercollegiate Basketball Team 1 unit
- PE 20abc - Intercollegiate Cross Country Teams 3 units
- PE 21abc - Off-Season Training for Intercollegiate Cross Country Teams 1 unit
- PE 35abc - Men's Intercollegiate Football Team 3 units
- PE 36abc - Off-Season Training for Men's Intercollegiate Football Team 1 unit
- PE 45abc - Men's Intercollegiate Golf Team 3 units
- PE 46abc - Off-Season Training for Men's Intercollegiate Golf Team 1 unit
- PE 57abc - Intercollegiate Swimming Teams 3 units
- PE 58abc - Off-Season Training for Intercollegiate Swimming Teams 1 unit
- PE 60abc - Women's Intercollegiate Soccer Team 3 units
- PE 61abc - Off-Season Training for Women's Intercollegiate Soccer Team 1 unit
- PE 66abc - Off-Season Training for Men's Intercollegiate Tennis Team 1 unit
- PE 70abc - Men's Intercollegiate Soccer Team 3 units
- PE 71abc - Off-Season Training for Men's Intercollegiate Soccer Team 1 unit
- PE 75abc - Intercollegiate Track and Field Teams 3 units
- PE 76abc - Off-Season Training for Intercollegiate Track and Field Teams 1 unit
- PE 80abc - Men's Intercollegiate Volleyball Team 3 units
- PE 81abc - Off-Season Training for Men's Intercollegiate Volleyball Team 1 unit
- PE 85abc - Men's Intercollegiate Water Polo Team 3 units
- PE 86abc - Off-Season Training for Men's Intercollegiate Water Polo Team 1 unit
- PE 87abc - Women's Intercollegiate Water Polo Team 3 units
- PE 105abc - Women's Intercollegiate Basketball Team 3 units
- PE 106abc - Off-Season Training for Women's Intercollegiate Basketball Team 1 unit
- PE 110abc - Women's Intercollegiate Volleyball Team 3 units
- PE 111abc - Off-Season Training for Women's Intercollegiate Volleyball Team 1 unit
- PE 115abc - Intercollegiate Tennis Teams 3 units
- PE 116abc - Off-Season Training for Women's Intercollegiate Tennis Team 1 unit
- PE 120abc - Women's Intercollegiate Softball Team 3 units
- PE 121abc - Off-Season Training for Women's Intercollegiate Softball Team 1 unit
- PE 132abc - Women's Intercollegiate Badminton Team 3 units
- PE 133abc - Off-Season Training for Women's Intercollegiate Badminton Team 1 unit
- PE 140abc - Intercollegiate Sand Volleyball Team 3 units

Team Activities:

Plus 4 units of activity-units distributed over a minimum of 3 categories to include: Aquatics, Combatives, Dance, Fitness, Individual/Dual Activities, Intercollegiate Sports, and Team Activities

- PE 4 - Basketball 1 unit
- PE 7 - Baseball 1 unit
- PE 74A - Beginning Soccer 1 unit
- PE 233 - Pep Squad and Cheer 1 unit
- PE 234ab - Pep Squad and Cheer Competition 1 unit
- PE 239 - Slow Pitch Softball 1 unit
- PE 253 - Volleyball 1 unit
- PE 255 - Beach Volleyball 1 unit

Physical Education Electives: 2-3 units

Plus 4 units of activity-units distributed over a minimum of 3 categories to include: Aquatics, Combatives, Dance, Fitness, Individual/Dual Activities, Intercollegiate Sports, and Team Activities

- PE 201 - Introduction to Adapted Physical Education 2 units
- PE 217 - Sports Officiating 2 units
- PE 266 - Stress Management for Healthy Living 3 unit
- PE 270 - Fitness and Sports Nutrition 3 units
- PE 272 - Care and Prevention of Athletic Injuries 3 units
- PE 275 - Sport Psychology 3 units
- PE 290 - Personal Fitness Trainer 3 units

Total Units: 22-23

Preparation for the Physical Education Transfer Major

For information on specific university major requirements, please obtain a transfer curriculum guide sheet in the Counseling Services Center, consult with your counselor, or visit the Transfer Center. You may use the transfer major requirements.

Political Science, AA

Behavioral and Social Sciences Division

www.elcamino.edu/academics/behavioralsocial

This degree provides students with an introduction to political science. Students will acquire knowledge of fundamental political theory and research as well as the principle functions and administrations of the governments of the United States and California. Upon successful program completion, students will be able to describe the methodology and research techniques employed by contemporary political scientists and analyze the organization and operation of California state and local governments. Students also will be able to examine urban problems, regional politics, and intergovernmental relations and their interrelationships with national institutions and policies as well as the international law and international organizations designed to deal with these issues. Competencies will be assessed regularly through examinations, essays, projects, and reports.

Required Core: 3 units

- POLI 1 - Governments of the United States and California 3 units
or
- POLI 1H - Honors Governments of the United States and California 3 units

12 units from:

- POLI 2 - Introduction to Comparative Politics 3 units
- POLI 3 - Introduction to Principles and Methods of Political Science 3 units
- POLI 5 - Ethnicity in the American Political Process 3 units
- POLI 6 - Civil Rights and Liberties in the United States 3 units
- POLI 10 - Introduction to International Relations 3 units

3 units from:

- ECON 1 - Principles of Economics: Macroeconomics 3 units
- ECON 2 - Principles of Economics: Microeconomics Theory 3 units
- HIST 101 - United States History to 1877 3 units
- HIST 102 - United States History from 1877 to the Present 3 units
- HIST 141 - History of Modern Civilizations 3 units
- PHIL 103 - Ethics and Society 3 units
- PHIL 111 - History of Ancient and Medieval Philosophy 3 units

Total Units: 18

Preparation for the Political Science Transfer Major

For information on specific university major requirements, please obtain a transfer curriculum guide sheet in the Counseling Services Center, consult with your counselor, or visit the Transfer Center. You may use the transfer major requirements to help you fulfill your associate degree requirements.

Real Estate, AA

Business Division

www.elcamino.edu/academics/business

The degree or certificates are designed to provide students with competencies to enter careers in residential and commercial real estate appraisal, escrow, exchange, development, investment, leasing, property management, sales, and title insurance. The program meets legislatively mandated education for the California Bureau of Real Estate (BRE) salesperson and broker license exams as well as the California Bureau of Real Estate Appraisers (BREA) license exam. Courses are approved by the BRE and BREA for basic and continuing education, including computer applications and Uniform Standards of Professional Appraisal Practice (USPAP).

Competencies are assessed using projects and exams.

For Gainful Employment program information, please visit www.elcamino.edu/academics/business/realestate.

Mortgage Brokerage Option:

Required Core: 18-19 units

- RE 11 - Real Estate Principles 3 units
- RE 13 - Real Estate Practice 3 units
- RE 14A - Real Estate Finance I 3 units
- RE 31 - Mortgage Loan Brokering and Lending 3 units
- RE 40 - Real Estate Appraisal 3 units

- BUS 1A - Financial Accounting 4 units
or

- RE 16 - Real Estate Economics 3 units

6 units from:

- RE 12A - Legal Aspects of Real Estate 3 units
- RE 19 - Real Property Management 3 units

- RE 26 - Escrows 3 units
- RE 14B - Advanced Real Estate Finance 3 units
or
- BUS 17 - Personal Finance 3 units

3-4 units from:

- BUS 5A - Income Tax Accounting 4 units
- BUS 15 - Business Mathematics 3 units
- BUS 28 - Written Business Communications 3 units

Total Units: 27-29

Real Estate Option:

Required Core: 18-19 units

- RE 11 - Real Estate Principles 3 units
- RE 12A - Legal Aspects of Real Estate 3 units
- RE 13 - Real Estate Practice 3 units
- RE 14A - Real Estate Finance I 3 units
- RE 40 - Real Estate Appraisal 3 units
- RE 16 - Real Estate Economics 3 units
or
- BUS 1A - Financial Accounting 4 units

6 units from:

- LAW 5 - Business Law 3 units
- RE 14B - Advanced Real Estate Finance 3 units
- RE 19 - Real Property Management 3 units
- RE 21 - Real Estate Investments 3 units
- RE 26 - Escrows 3 units
- RE 31 - Mortgage Loan Brokering and Lending 3 units
- RE 41 - Advanced Real Estate Appraisal 3 units

Total Units: 24-25

Real Estate Appraisal Option:

Required Core: 15 units

- RE 11 - Real Estate Principles 3 units
- RE 14A - Real Estate Finance I 3 units
- RE 16 - Real Estate Economics 3 units
- RE 40 - Real Estate Appraisal 3 units
- RE 41 - Advanced Real Estate Appraisal 3 units

6 units from:

- RE 14B - Advanced Real Estate Finance 3 units
- RE 19 - Real Property Management 3 units
- RE 21 - Real Estate Investments 3 units
- RE 31 - Mortgage Loan Brokering and Lending 3 units

6 units from:

- ARCH 150A - Construction Documentation I 3 units
- BUS 15 - Business Mathematics 3 units
- BUS 28 - Written Business Communications 3 units
- CIS 13 - Computer Information Systems 3 units

Total Units: 27

Recreation, AA

Health Sciences and Athletics Division

www.elcamino.edu/academics/healthsciences

The recreation program is designed for students desiring to transfer or to obtain entry-level positions in recreation and leisure services. After acquiring the historical, philosophical, and theoretical foundations of recreation, students will apply administrative, leadership, planning, supervision, and counseling skills in diverse commercial, municipal, and camp recreation settings. Competencies will be assessed by evaluating the student's ability to solve problems in recreation and leisure program design and to develop organizational skills in a variety of situations.

Required Core: 14 units

- FAID 1 - First Aid, Cardiopulmonary Resuscitation (CPR) and Basic Emergency Care 3 units
- PE 217 - Sports Officiating 2 units
- RECR 207 - Introduction to Recreation 3 units
- RECR 217 - Recreational Leadership 3 units
- RECR 307 - Camp Counseling: Leadership and Programming 3 units

7-9 units from:

- ANAT 30 - Essentials of Anatomy and Physiology 4 units
- CDEV 103 - Child Growth and Development 3 units
- PE 247 - Swimming, Lifeguard Training 2 units
- PE 248 - Swimming, Water Safety Instructor 2 units
- PSYC 5 - General Psychology 3 units
- SLAN 111 - American Sign Language I 4 units

Total Units: 21-23

Preparation for the Recreation Transfer Major

For information on specific university major requirements, please obtain a transfer curriculum guide sheet in the Counseling Services Center, consult with your counselor, or visit the Transfer Center. You may use the transfer major requirements to help you fulfill your associate degree requirements.

Sign Language/Interpreter Training, AA

Health Sciences and Athletics Division

www.elcamino.edu/academics/healthsciences

Upon completion of the program, students will have the necessary language and interpreting skills for entry-level sign language interpreting positions in a variety of community settings, such as medical, vocational, and post-secondary. American Sign Language (ASL) and deaf culture courses give students general communication skills for interacting and working with deaf and hard-of-hearing individuals. Interpreting coursework enhances ASL/English cross-cultural communication styles in consecutive and simultaneous interpreting, and includes training in the ethics and practical approaches that must be understood by a practicing interpreter. Students will be prepared to take local evaluations and/or transfer to a four year program. Most students who continue to develop their interpreting skills will be prepared to seek national certification within two to five years.

At least 50 percent of the courses required for the major must be completed at El Camino College.
For Gainful Employment program information, please visit www.elcamino.edu/academics/src/signlang.asp.

Required Core:

- SLAN 113 - American Sign Language III 4 units
- SLAN 114 - American Sign Language IV 4 units
- SLAN 115 - American Sign Language V 4 units
- SLAN 120 - Fingerspelling and Numerical Concepts 1 unit
- SLAN 130 - Deaf Culture 3 units
- SLAN 210 - American Sign Language to English Interpreting I 2 units
- SLAN 211 - English to American Sign Language Interpreting I 2 units
- SLAN 220 - American Sign Language to English Interpreting II 2 units
- SLAN 221 - English to American Sign Language Interpreting II 2 units
- SLAN 230 - Sign Language Interpreting III 2 units

Total Units: 32

Recommended Electives:

- ANTH 4 - Language and Culture 3 units
- CDEV 150 - Introduction to Children with Special Needs 3 units
- COMS 100 - Public Speaking 3 units
- THEA 113 - Introduction to Acting 3 units

Spanish, AA

Humanities Division

www.elcamino.edu/academics/humanities

By completing the degree requirements, the student will acquire proficiency in speaking, reading, writing, and understanding Spanish and will gain knowledge of Spanish and Spanish-American culture. The student will be able to communicate in Spanish, write formal compositions, and read the texts of Spanish and Spanish-American authors, all at the Intermediate-Mid level of competency. Competencies will be assessed throughout the language sequence with written and oral exams. This major provides career opportunities where knowledge of Spanish is useful and prepares students for continued advanced learning of Spanish.

The student who has completed two or more years of Spanish in high school will have the opportunity to enroll with advanced standing and to complete semesters 5 and/or 6 at El Camino College. It is recommended that language majors enroll in conversation classes. At least 50 percent of the courses required for the Spanish major must be completed at El Camino College. Spanish 4 must be completed at El Camino College.

Required Core: 4 units

- SPAN 4 - Intermediate Spanish II 4 units

4-11 units from:

- SPAN 1 - Elementary Spanish I 4 units
- SPAN 2 - Elementary Spanish II 4 units
- SPAN 3 - Intermediate Spanish I 4 units
- SPAN 5 - Advanced Spanish I 3 units
- SPAN 6 - Advanced Spanish II 3 units
- SPAN 21 - Beginning Conversational Spanish 2 units
- SPAN 22 - Intermediate Conversational Spanish 2 units
- SPAN 52A - Spanish for Native Speakers I 4 units
- SPAN 52B - Spanish for Native Speakers II 4 units

a minimum of 3 units from:

- ANTH 7 - Native Peoples of South America 3 units
- ART 207 - Art History of Mexico and Central and South America 3 units
- ENGL 42 - Chicano and Latino Literature 3 units
- ENGL 48 - Modern Literature of Latin America 3 units
- HIST 112 - History of the Chicano in the United States 3 units
- HIST 154 - A History of Mexico 3 units

Total Units: 18

Preparation for the Spanish Transfer Major

For information on specific university major requirements, please obtain a transfer curriculum guide sheet in the Counseling Services Center, consult with your counselor, or visit the Transfer Center. You may use the transfer major requirements to help you fulfill your associate degree requirements.

Theatre, AA

Fine Arts Division

www.elcamino.edu/academics/finearts

The theatre program provides students with a comprehensive foundation in theatre, history, practice of theatre, and entertainment lighting. This is fulfilled through a structured program of theatre study in the areas of history, dramatic literature, acting, performance, technical theatre, entertainment lighting, and related crafts. Students will demonstrate their proficiency through acting competency, public performance, research papers, essays, class projects, and technical crew assignments. Program assessment is measured by public performances, program completion, transferability, and periodic program review. Students qualify to pursue a variety of theatre and entertainment related careers and advanced degree options.

Required Core: 21 units

- THEA 103 - Theatre Appreciation 3 units
- THEA 104 - Dramatic Literature 3 units
- THEA 114 - Fundamentals of Acting 3 units
- THEA 184 - Stagecraft 3 units
- THEA 185 - Introduction to Stage Lighting 3 units
- THEA 189 - Costuming for the Stage 3 units
- THEA 214A - Intermediate Acting 3 units

3 units from:

- THEA 197abcd - Technical Theatre Production 1 unit *
- THEA 270abcd - Beginning Theatre Production 1 unit

2-3 units from:

- THEA 188 - Fundamentals of Stage Makeup 3 units
- THEA 215 - Improvisation 2 units
- THEA 216 - Acting: Audition and Cold Reading 3 units
- THEA 217 - Acting Shakespeare 3 units
- THEA 240 - Fundamentals of Stage Direction 3 units

Total Units: 26-27

*Note: a minimum of 1 unit from THEA 197abcd is required.

Anthropology, AA-T

Behavioral and Social Sciences Division

www.elcamino.edu/academics/behavioralsocial

The anthropology program provides a foundation in the fields of socio-cultural anthropology, biological anthropology, and archaeology as they relate to the physical and behavioral aspects of the world's populations of the past and the present. Students in this program will be able to discern the basic issues facing anthropologists, apply the methodologies that anthropologists use to approach the problems in the field, and critically evaluate the record of past accomplishments. Competencies will be assessed regularly through examinations and projects.

The Associate of Arts for Transfer (AA-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AA-T are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AA-T, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education - Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AA-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AA-T.

Required Core: 9 units

- ANTH 1 - Introduction to Physical Anthropology 3 units
- ANTH 2 - Introduction to Cultural Anthropology 3 units
- ANTH 3 - Introduction to Archaeology 3 units

List A: 3-4 units

- ANTH 4 - Language and Culture 3 units

- MATH 150 - Elementary Statistics with Probability 4 units
or
- PSYC 9A - Introduction to Statistics and Data Analysis for the Behavioral Sciences 4 units
or
- SOCI 109A - Introduction to Statistics and Data Analysis for the Behavioral Sciences 4 units

List B: 3-4 units

Any course from List A not already completed

- ANAT 32 - General Human Anatomy 4 units

- GEOG 8 - Introduction to Geographic Information Systems 4 units
or
- GEOL 1 - Physical Geology 3 units
and
- GEOL 3 - Physical Geology Laboratory 1 unit

List C: 3-4 units

Any course from List A or List B not already completed

- ANTH 5 - Physical Anthropology Laboratory 1 unit
- ANTH 6 - Native Peoples of North America 3 units
- ANTH 7 - Native Peoples of South America 3 units
- ANTH 8 - Ancient Civilizations of Mesoamerica 3 units
- ANTH 9 - Women, Culture, and Society 3 units
- ANTH 11 - Anthropology of Religion, Magic and Witchcraft 3 units
- GEOG 2 - Cultural Geography 3 units
- GEOG 5 - World Regional Geography 3 units
- HIST 122 - United States Social History: Cultural Pluralism in America 3 units

- SOCI 101 - Introduction to Sociology 3 units
- SOCI 107 - Issues of Race and Ethnicity in the United States 3 units
- SOCI 108 - Global Perspectives on Race and Ethnicity 3 units

Total Units: 18-21

Art History, AA-T

Fine Arts Division

www.elcamino.edu/academics/finearts

The art program provides students with a comprehensive foundation in the history, theory, and practice of art. Each student acquires observational, compositional, technical, interpretative, and expressive competency through participation in an extensive range of studio art courses. Exposure to a culturally diverse art history curriculum prepares each student to analyze, assess, and discuss works of art from a variety of historical and style periods. Proficiencies are demonstrated through class projects, critiques, research papers, essays, and objective tests. Program assessment is measured by portfolios, juried and public exhibitions, program completion, transferability, and periodic program reviews. Students will be prepared to transfer to a CSU and major in art history, and pursue a variety of art-related careers.

The Associate of Arts for Transfer (AA-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AA-T are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AA-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education - Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AA-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AA-T.

Required Core: 9 units

- ART 102A - History of Western Art - Prehistoric to Gothic 3 units
- ART 102B - History of Western Art - Proto-Renaissance to 19th Century 3 units
- ART 102C - History of Western Art - 19th Century to Contemporary Times 3 units

List A: 3 units

- ART 205A - History of Asian Art - India and Southeast Asia 3 units
- ART 205B - History of Asian Art - China, Korea, and Japan 3 units
- ART 207 - Art History of Mexico and Central and South America 3 units
- ART 209 - History of African Art 3 units

List B: 3 units

- ART 110 - Drawing Fundamentals I 3 units
- ART 130 - Two-Dimensional Design I 3 units
- ART 141 - Digital Art Fundamentals 3 units
- ART 160 - Three-Dimensional Design 3 units
- ART 161 - Beginning Ceramics 3 units
- ART 181 - Beginning Sculpture 3 units
- ART 217 - Life Drawing I 3 units
- ART 222 - Fundamentals of Painting I 3 units
- PHOT 102 - Basic Photography 3 units

List C: 3 units

Any course from List A or List B not already completed

- ART 106 - Cross-Cultural Art 3 units
- ART 109 - Contemporary Art in World Cultures 3 units

- ART 150 - The Art of Photography 3 units
or
- PHOT 150 - The Art of Photography 3 units

- ART 208 - History of American Art 3 units

Total Units: 18

Communication Studies, AA-T

Fine Arts Division

www.elcamino.edu/academics/finearts

The degree provides students with a thorough foundation in the theory and practice of communication studies. This is achieved through a variety of courses that serve to develop personal, business, and professional communication skills in individual, interpersonal, and group situations, along with skills in research, organization, critical thinking, argumentation, and forensics. Students will demonstrate their proficiency through performance, class projects, research papers, objective tests, critiques, and competitions. Program assessment is measured by completion, evaluation of student learning outcomes, transferability, competitions at the local, state, and national levels, and periodic program review.

The Associate of Arts for Transfer (AA-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AA-T are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AA-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education - Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AA-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university.

The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AA-T.

Required Core: 3 units

- COMS 100 - Public Speaking 3 units

List A: 6 units

- COMS 120 - Argumentation and Debate 3 units
- COMS 130 - Interpersonal Communication 3 units
- COMS 140 - Small Group Communication 3 units

List B: 6 units

Any course from List A not already completed

- COMS 250 - Oral Interpretation of Literature 3 units
- COMS 260 - Introduction to Intercultural Communication 3 units
- COMS 265 - Mass Communication 3 units

List C: 3 units

Any course from List A or List B not already completed

- ANTH 2 - Introduction to Cultural Anthropology 3 units
- ANTH 4 - Language and Culture 3 units
- COMS 270 - Organizational Communication 3 units
- COMS 292abcd - Forensics - Individual Events 2 units *
- COMS 293abcd - Forensics - Team Events 2 units *

- ENGL 1B - Literature and Composition 3 units
or
- ENGL 1BH - Honors Literature and Composition 3 units

- PSYC 5 - General Psychology 3 units
- SOCI 101 - Introduction to Sociology 3 units

Total Units: 18

* Note: One semester each of COMS 292abcd and COMS 293abcd may be counted for the major.

Economics, AA-T

Behavioral and Social Sciences Division

www.elcamino.edu/academics/behavioralsocial

The degree in economics is designed to provide students with a foundation in macroeconomics and microeconomics theory. Economics majors will acquire knowledge of the principle economic models for understanding how the national economy functions, the fundamental laws of supply and demand, and international trade theory. Students will be able to apply methodologies to assess fiscal and monetary policy, price levels, and the allocation of goods and resources in competitive and monopolistic markets. Competencies will be assessed through regularly scheduled objective and essay examinations and problem solving assignments.

The Associate of Arts for Transfer (AA-T) is intended for students who plan to complete a bachelor's degree in Economics or similar major at a CSU campus. Students completing the AA-T are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AA-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education - Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AA-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AA-T.

Required Core: 14-15 units

- ECON 1 - Principles of Economics: Macroeconomics 3 units
or
- ECON 1H - Honors Principles of Economics: Macroeconomics 3 units

- ECON 2 - Principles of Economics: Microeconomics Theory 3 units

- MATH 150 - Elementary Statistics with Probability 4 units
or
- MATH 150H - Honors Elementary Statistics with Probability 4 units

- MATH 160 - Calculus I for the Biological, Management and Social Sciences 4 units
or
- MATH 165 - Calculus for Business and Social Sciences 5 units
or
- MATH 190 - Single Variable Calculus and Analytic Geometry I 5 units

List A: 3-5 units

- BUS 1A - Financial Accounting 4 units
- BUS 1B - Managerial Accounting 4 units
- BUS 28 - Written Business Communications 3 units
- CIS 13 - Computer Information Systems 3 units
- MATH 140 - Finite Mathematics for Business and Social Sciences 4 units
- MATH 191 - Single Variable Calculus and Analytic Geometry II 5 units

List B: 3-5 units

Any course from List A not already completed

- MATH 220 - Multi-Variable Calculus 5 units
- MATH 270 - Differential Equations with Linear Algebra 5 units

Total Units: 20-25

Elementary Teacher Education, AA-T

Behavioral and Social Sciences Division

www.elcamino.edu/academics/behavioralsocial

The program is designed for students who wish to earn a multiple-subject teaching credential authorizing them to teach in grades K-5. Students will study a broad range of subjects to prepare them for teaching, including English, mathematics, science, social science, visual and performing arts, and human development. Upon successful completion of the program, students will be prepared to transfer to a CSU and major in Liberal Studies. Competencies will be assessed regularly through projects, examinations, laboratory experiments, and presentations.

The Associate of Arts for Transfer (AA-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AA-T are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AA-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education - Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AA-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AA-T.

Required Core: 42 units

- BIOL 10 - Fundamentals of Biology 4 units
- CDEV 103 - Child Growth and Development 3 units
- COMS 100 - Public Speaking 3 units
- EDUC 201 - Foundations in Education 3 units
- ENGL 1A - Reading and Composition 4 units
- ENGL 1B - Literature and Composition 3 units
- GEOG 5 - World Regional Geography 3 units
- GEOL 6 - Earth Science in Education 4 units
- HIST 101 - United States History to 1877 3 units
- HIST 140 - History of Early Civilizations 3 units
- MATH 110 - Structures and Concepts in Mathematics 3 units
- POLI 1 - Governments of the United States and California 3 units
- PSCI 25 - Exploring Physical Sciences 3 units

List A: 3 units

- COMS 120 - Argumentation and Debate 3 units
- ENGL 1C - Critical Thinking and Composition 3 units
- PHIL 105 - Critical Thinking and Discourse 3 units
- PHIL 106 - Introduction to Symbolic Logic 3 units
- PSYC 3 - Critical Thinking and Psychology 3 units

List B: 3 units

- ART 101 - Art and Visual Culture: A Global Perspective 3 units
- DANC 101 - Dance Appreciation 3 units
- MUSI 111 - Music Appreciation Survey 3 units
- THEA 103 - Theatre Appreciation 3 units

Total Units: 48

English, AA-T

Humanities Division

www.elcamino.edu/academics/humanities

The English program develops the student's ability to read both prose and poetry with understanding and discernment. The student will acquire competence in writing college-level expository essays and applying research strategies. The student will also develop interpretive and analytical skills through exposure to a wide range of literature. Competencies will be assessed primarily by evaluating the student's critical thinking abilities as demonstrated through written work. Completion of the program prepares the English major for any profession or industry requiring strong communication skills as well as transfer.

The Associate of Arts for Transfer (AA-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AA-T are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AA-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education - Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AA-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AA-T.

Required Core: 6 units

- ENGL 1B - Literature and Composition 3 units
- ENGL 1BH - Honors Literature and Composition 3 units
- ENGL 1C - Critical Thinking and Composition 3 units
- ENGL 1CH - Honors Critical Thinking and Composition 3 units

List A: 6 units

- ENGL 15A - Survey of British Literature I 3 units
- ENGL 15B - Survey of British Literature II 3 units
- ENGL 35 - World Literature: 3500 BCE to 1650 CE 3 units
- ENGL 36 - World Literature: 1650 CE to Present 3 units
- ENGL 40A - American Literature I 3 units
- ENGL 40B - American Literature II 3 units

List B: 3 units

Any course from List A not already completed

- ENGL 24A - Creative Writing: Introduction to Poetry 3 units
- ENGL 25A - Creative Writing: Introduction to the Craft of Fiction 3 units
- ENGL 31 - Mythology and Folklore 3 units
- ENGL 42 - Chicano and Latino Literature 3 units
- ENGL 43 - African American Literature 3 units
- ENGL 44 - The Literature of American Ethnic Groups 3 units

List C: 3-4 units

Any course from List A or List B not already completed

- CHIN 1 - Elementary Chinese I 4 units
- CHIN 2 - Elementary Chinese II 4 units
- CHIN 3 - Intermediate Chinese I 4 units
- ENGL 12 - Introduction to Fiction 3 units
- ENGL 20 - Shakespeare's Plays - Tragedies and Romances 3 units
- ENGL 21 - Shakespeare's Plays - Comedies and Histories 3 units
- ENGL 27 - Children's Literature 3 units
- ENGL 28 - Images of Women in Literature 3 units
- ENGL 30 - The English Bible as Literature 3 units
- ENGL 32 - Creative Writing: A Workshop in Fiction 3 units
- ENGL 34 - The Short Story 3 units
- ENGL 39 - Literature and Film 3 units
- ENGL 41B - Survey of Film: 1950 to the Present 3 units
- ENGL 48 - Modern Literature of Latin America 3 units
- ENGL 78 - Creative Writing: Screenwriting 3 units
- ENGL 98 - College Literary Magazine Editing and Publishing 3 units
- FREN 1 - Elementary French I 4 units
- FREN 2 - Elementary French II 4 units
- FREN 3 - Intermediate French I 4 units

- FREN 4 - Intermediate French II 4 units
- FREN 5 - Advanced French I 3 units
- FREN 6 - Advanced French II 3 units
- GERM 1 - Elementary German I 4 units
- GERM 2 - Elementary German II 4 units
- HUMA 1 - An Introduction to the Humanities 3 units
- ITAL 1 - Elementary Italian I 4 units
- ITAL 2 - Elementary Italian II 4 units
- JAPA 1 - Elementary Japanese I 4 units
- JAPA 2 - Elementary Japanese II 4 units
- JAPA 3 - Intermediate Japanese I 4 units
- JAPA 4 - Intermediate Japanese II 4 units
- JOUR 1 - News Writing and Reporting 3 units
- SPAN 1 - Elementary Spanish I 4 units
- SPAN 2 - Elementary Spanish II 4 units
- SPAN 3 - Intermediate Spanish I 4 units
- SPAN 4 - Intermediate Spanish II 4 units
- SPAN 5 - Advanced Spanish I 3 units
- SPAN 6 - Advanced Spanish II 3 units
- SPAN 52A - Spanish for Native Speakers I 4 units
- SPAN 52B - Spanish for Native Speakers II 4 units

Total Units: 18-19

Geography, AA-T

Natural Sciences Division

www.elcamino.edu/academics/naturalsciences

The program is designed to provide students the opportunity to obtain a degree upon successful completion of the requirements of a geography transfer major. The geography student will apply fundamental concepts and principles of natural and cultural systems as studied in a spatial context. Competencies will be assessed by examining the student's ability to explain the relationships between people, places, and environments. Students will also map spatial distributions of natural and cultural features.

The Associate of Arts for Transfer (AA-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AA-T are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AA-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education - Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AA-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university.

The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AA-T.

Required Core: 7 units

- GEOG 1 - Physical Geography 3 units
- GEOG 2 - Cultural Geography 3 units
- GEOG 6 - Physical Geography Laboratory 1 unit

List A: 6-7 units

- GEOG 5 - World Regional Geography 3 units
- GEOG 7 - Geography of California 3 units
- GEOG 8 - Introduction to Geographic Information Systems 4 units
- GEOG 9 - Weather and Climate 3 units

List B: 6 units

Any course from List A not already completed

- ANTH 2 - Introduction to Cultural Anthropology 3 units
- GEOL 1 - Physical Geology 3 units

Total Units: 19-20

History, AA-T

Behavioral and Social Sciences Division

www.elcamino.edu/academics/behavioralsocial

The degree provides students with a foundation in the science of historical inquiry. After completing the program requirements, students will gain an understanding of the methodologies and schools of interpretation utilized by historians to study the past. Students will also demonstrate knowledge of the primary cultural, economic, intellectual, political, social, and diplomatic institutions of the United States and the world. Competencies will be assessed through the evaluation of student term papers and projects, essays, and regularly scheduled examinations. The major prepares students for transfer to a CSU and training in areas such as education, research, archival science, and government.

The Associate of Arts for Transfer (AA-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AA-T are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AA-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education - Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AA-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AA-T.

Required Core: 6 units

- HIST 101 - United States History to 1877 3 units
or
- HIST 101H - Honors United States History to 1877 3 units

- HIST 102 - United States History from 1877 to the Present 3 units
or
- HIST 102H - Honors United States History from 1877 to the Present 3 units

List A: 6 units

- HIST 140 - History of Early Civilizations 3 units
- HIST 141 - History of Modern Civilizations 3 units

List B:

one course from Area 1 and Area 2

3 units from Area 1

- ART 106 - Cross-Cultural Art 3 units
- ART 205A - History of Asian Art - India and Southeast Asia 3 units
- ART 205B - History of Asian Art - China, Korea, and Japan 3 units
- ART 207 - Art History of Mexico and Central and South America 3 units
- ART 209 - History of African Art 3 units
- CHIN 1 - Elementary Chinese I 4 units
- CHIN 2 - Elementary Chinese II 4 units
- CHIN 24 - Introduction to Chinese Language and Culture 3 units
- ENGL 28 - Images of Women in Literature 3 units
- ENGL 31 - Mythology and Folklore 3 units
- ENGL 35 - World Literature: 3500 BCE to 1650 CE 3 units
- ENGL 36 - World Literature: 1650 CE to Present 3 units
- ENGL 42 - Chicano and Latino Literature 3 units
- ENGL 43 - African American Literature 3 units
- FREN 1 - Elementary French I 4 units
- FREN 2 - Elementary French II 4 units
- FREN 3 - Intermediate French I 4 units
- FREN 4 - Intermediate French II 4 units
- FREN 5 - Advanced French I 3 units
- FREN 6 - Advanced French II 3 units
- GERM 1 - Elementary German I 4 units
- GERM 2 - Elementary German II 4 units
- HIST 105 - Women and American History from the Colonial Era to 1877 3 units
- HIST 106 - Women and American History from 1877 to the Present 3 units
- HIST 110 - The African American in the United States to 1877 3 units

- HIST 111 - The African American in the United States from 1877 to the Present 3 units
- HIST 112 - History of the Chicano in the United States 3 units
- HIST 122 - United States Social History: Cultural Pluralism in America 3 units
- HIST 152 - History of Latin America through Independence 3 units
- HIST 154 - A History of Mexico 3 units
- ITAL 1 - Elementary Italian I 4 units
- ITAL 2 - Elementary Italian II 4 units
- ITAL 24 - Introduction to Italian Culture 3 units
- JAPA 1 - Elementary Japanese I 4 units
- JAPA 2 - Elementary Japanese II 4 units
- JAPA 3 - Intermediate Japanese I 4 units
- JAPA 4 - Intermediate Japanese II 4 units
- JAPA 25 - Cultural Aspects of the Japanese Language 3 units
- PHIL 114 - Asian Philosophy 3 units
- SLAN 111 - American Sign Language I 4 units
- SLAN 112 - American Sign Language II 4 units
- SLAN 113 - American Sign Language III 4 units
- SLAN 114 - American Sign Language IV 4 units
- SLAN 130 - Deaf Culture 3 units
- SPAN 1 - Elementary Spanish I 4 units
- SPAN 2 - Elementary Spanish II 4 units
- SPAN 3 - Intermediate Spanish I 4 units
- SPAN 4 - Intermediate Spanish II 4 units
- SPAN 5 - Advanced Spanish I 3 units
- SPAN 6 - Advanced Spanish II 3 units
- SPAN 24 - Introduction to Spanish and Latin American Language and Cultures 3 units
- SPAN 52A - Spanish for Native Speakers I 4 units
- SPAN 52B - Spanish for Native Speakers II 4 units

3 units from Area 2

- ASTU 7 - History of American Popular Culture 3 units
- ANTH 2 - Introduction to Cultural Anthropology 3 units
- ANTH 3 - Introduction to Archaeology 3 units
- ANTH 4 - Language and Culture 3 units
- ANTH 6 - Native Peoples of North America 3 units
- ANTH 7 - Native Peoples of South America 3 units
- ANTH 8 - Ancient Civilizations of Mesoamerica 3 units
- ANTH 9 - Women, Culture, and Society 3 units
- ANTH 11 - Anthropology of Religion, Magic and Witchcraft 3 units
- ECON 5 - Fundamentals of Economics 3 units
- ECON 1 - Principles of Economics: Macroeconomics 3 units
or
- ECON 1H - Honors Principles of Economics: Macroeconomics 3 units
- ECON 2 - Principles of Economics: Microeconomics Theory 3 units
- ESTU 1 - Introduction to Ethnic Studies 3 units
- GEOG 2 - Cultural Geography 3 units
- GEOG 5 - World Regional Geography 3 units
or
- GEOG 5H - Honors World Regional Geography 3 units
- GEOG 7 - Geography of California 3 units
- HIST 105 - Women and American History from the Colonial Era to 1877 3 units
- HIST 106 - Women and American History from 1877 to the Present 3 units
- HIST 110 - The African American in the United States to 1877 3 units
- HIST 111 - The African American in the United States from 1877 to the Present 3 units
- HIST 112 - History of the Chicano in the United States 3 units
- HIST 122 - United States Social History: Cultural Pluralism in America 3 units
or
- HIST 122H - Honors United States Social History: Cultural Pluralism in America 3 units

- HIST 152 - History of Latin America through Independence 3 units
- HIST 154 - A History of Mexico 3 units
- JOUR 12 - Mass Media and Society 3 units

- POLI 1 - Governments of the United States and California 3 units
or
- POLI 1H - Honors Governments of the United States and California 3 units

- POLI 2 - Introduction to Comparative Politics 3 units
- POLI 3 - Introduction to Principles and Methods of Political Science 3 units
- POLI 5 - Ethnicity in the American Political Process 3 units
- POLI 6 - Civil Rights and Liberties in the United States 3 units
- POLI 7 - Political Philosophy 3 units

- POLI 10 - Introduction to International Relations 3 units
or
- POLI 10H - Honors Introduction to International Relations 3 units

- PSYC 2 - Psychology for Effective Living 3 units

- PSYC 5 - General Psychology 3 units
or
- PSYC 5H - Honors General Psychology 3 units

- PSYC 10 - African American Psychology 3 units
- PSYC 19 - Psychology of Sexual Orientation and Gender Diversity 3 units
- PSYC 25 - The Psychology of Gender 3 units
- PE 275 - Sport Psychology 3 units
- SLAN 130 - Deaf Culture 3 units

- SOCI 101 - Introduction to Sociology 3 units
or
- SOCI 101H - Honors Introduction to Sociology 3 units

- SOCI 102 - The Family 3 units
- SOCI 104 - Social Problems 3 units
- SOCI 107 - Issues of Race and Ethnicity in the United States 3 units
- SOCI 108 - Global Perspectives on Race and Ethnicity 3 units
- SOCI 112 - Introduction to Criminology 3 units
- SOCI 113 - Gender and Society 3 units
- SOCI 115 - Sociology of Death and Dying 3 units
- SOCI 118 - Sociology of Sexualities 3 units
- WSTU 1 - Introduction to Women's Studies 3 units

Total Units: 18

Journalism, AA-T

Humanities Division

www.elcamino.edu/academics/humanities

The journalism program prepares the student to acquire proficiency in traditional and online news gathering techniques and in analyzing and evaluating information. The student will be able to write a variety of publishable stories for online and print journalism and to apply principles of editing and publication design. Competencies will be assessed regularly by performance in the college newspaper's print and online editions and its magazine, as well as by their participation in state and national competitions. The major prepares the student to transfer to a CSU and major in journalism, mass communications, public relations or advertising as well as provide career opportunities in digital and print journalism, newspaper, magazine, advertising, public relations, and radio/television work.

The Associate of Arts for Transfer (AA-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AA-T are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AA-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education - Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AA-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AA-T.

Required Core: 9 units

- JOUR 1 - News Writing and Reporting 3 units
- JOUR 12 - Mass Media and Society 3 units

- JOUR 9abcd - Magazine Editing and Production 3 units *
- or
- JOUR 11abcd - Newspaper Publication 3 units *

List A: 3 units

- JOUR 8 - Advanced Reporting and News Editing 3 units
- JOUR 14abcd - Multimedia Journalism 3 units *

- JOUR 6 - Basic Photojournalism 3 units
- or
- PHOT 106 - Basic Photojournalism 3 units

- JOUR 9abcd - Magazine Editing and Production 3 units *
- or
- JOUR 11abcd - Newspaper Publication 3 units *

List B: 6-7 units

- COMS 120 - Argumentation and Debate 3 units

- ECON 1 - Principles of Economics: Macroeconomics 3 units
- or
- ECON 2 - Principles of Economics: Microeconomics Theory 3 units

- ENGL 1C - Critical Thinking and Composition 3 units

- JOUR 6 - Basic Photojournalism 3 units
- or
- PHOT 106 - Basic Photojournalism 3 units

- JOUR 11abcd - Newspaper Publication 3 units *
- JOUR 14abcd - Multimedia Journalism 3 units *

- MATH 150 - Elementary Statistics with Probability 4 units
- or
- PSYC 9A - Introduction to Statistics and Data Analysis for the Behavioral Sciences 4 units
- or
- SOCI 109A - Introduction to Statistics and Data Analysis for the Behavioral Sciences 4 units

- PHIL 106 - Introduction to Symbolic Logic 3 units

- POLI 1 - Governments of the United States and California 3 units
- POLI 2 - Introduction to Comparative Politics 3 units

Total Units: 18-19

*Note: one semester each of JOUR 9abcd, JOUR 11abcd and JOUR 14abcd may be counted for the major.

Note: JOUR 6 is the same course as PHOT 106. Course credit is limited to JOUR 6 or PHOT 106.

Philosophy, AA-T

Behavioral and Social Sciences Division

www.elcamino.edu/academics/behavioralsocial

The degree provides students with a foundation in philosophical inquiry. Upon successful completion, students will understand the major concepts and issues that have shaped philosophical traditions. This will include the ability to critically analyze contemporary social and moral issues and to assess the influential positions on theories of truth and the nature of reality. The student will also be able to analyze the logical structure of arguments and the rules of critical reasoning in their own and others' writing and thinking. Competencies will be assessed regularly through examinations, projects, and written reports. This major prepares students to pursue careers in education, law, health, and other fields where analytical skills are required.

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3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AA-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university.

The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AA-T.

Required Core: 6 units

- PHIL 106 - Introduction to Symbolic Logic 3 units
- PHIL 101 - Introduction to Philosophy 3 units
or
- PHIL 101H - Honors Introduction to Philosophy 3 units
or
- PHIL 103 - Ethics and Society 3 units

List A: 3 units

- PHIL 105 - Critical Thinking and Discourse 3 units
or
- PHIL 105H - Honors Critical Thinking and Discourse 3 units
- PHIL 111 - History of Ancient and Medieval Philosophy 3 units
- PHIL 112 - History of Modern Philosophy 3 units
- PHIL 113 - Contemporary Philosophy 3 units
- PHIL 114 - Asian Philosophy 3 units

List B: 6 units

Any course from List A not already completed

- HIST 140 - History of Early Civilizations 3 units
- HIST 141 - History of Modern Civilizations 3 units
- PHIL 107 - Philosophy of Religion 3 units

List C: 3 units

Any course from List A or List B not already completed

- PHIL 115 - Existentialism 3 units
- PHIL 117 - Political Philosophy 3 units
or
- POLI 7 - Political Philosophy 3 units

Total Units: 18

Note: PHIL 117 is the same course as POLI 7.

Physical Education: Kinesiology AA-T

Health Sciences and Athletics Division

www.elcamino.edu/academics/healthsciences

The kinesiology program provides a foundation for the study of diverse dimensions of exercise science, sport, and movement studies. Upon completion of the program, students will be prepared to transfer and major in kinesiology. Students will have knowledge and skills for advancement into a number of kinesiology fields, such as adapted physical education, athletic training, coaching, exercise science, fitness specialist, kinesiotherapy, and teaching. Competency will be assessed by a student's ability to solve problems in exercise science, exercise program design and to demonstrate and/or evaluate movement skills, tactics, and strategies in various physical activities.

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4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

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Required Core: 11 units

- PE 277 - Introduction to Kinesiology 3 units

Select Option 1 or Option 2

Option 1

- ANAT 32 - General Human Anatomy 4 units
- PHYO 31 - Human Physiology 4 units

Option 2

- APHY 34A - Anatomy and Physiology I 4 units
- APHY 34B - Anatomy and Physiology II 4 units

3-5 units of Movement-Based Courses

Select a maximum of one course from any two to three categories:

Aquatics:

- PE 240A - Beginning Swimming 1 unit
- PE 240B - Intermediate Swimming 1 unit
- PE 240C - Advanced Swimming 1 unit
- PE 250 - Techniques of Surfboard Riding 1 unit

Combative:

- PE 18A - Beginning Boxing 1 unit
- PE 220 - Naginata: A Japanese Martial Art 1 unit
- PE 221 - Combative Arts and Self Defense 1 unit

Dance:

- DANC 110 - Beginning Dance 2 units
- DANC 120A - Beginning Ballet A 2 units
- DANC 120B - Beginning Ballet B 2 units
- DANC 130A - Beginning Modern Dance A 2 units
- DANC 130B - Beginning Modern Dance B 2 units
- DANC 140 - Jazz Dance I 2 units
- DANC 161 - Tap Dance I - Beginning 1 unit
- DANC 162 - Hip Hop Dance 2 units
- DANC 164 - World Dance 1 unit
- DANC 165 - African Dance 1 unit
- DANC 167 - Social and Ballroom Dance 1 unit
- DANC 168 - Latin Social Dance 2 units
- DANC 220A - Intermediate Ballet A 2 units
- DANC 220B - Intermediate Ballet B 2 units
- DANC 230A - Intermediate Modern Dance A 2 units
- DANC 230B - Intermediate Modern Dance B 2 units
- DANC 240 - Jazz Dance II 2 units

- DANC 250 - Pilates Mat Class 3 units
- DANC 261 - Tap Dance II - Intermediate 2 units
- DANC 262 - Commercial Dance 2 units
- DANC 265 - Intermediate African Dance 2 units
- DANC 268 - Intermediate Latin Social Dance 2 units

Fitness:

- PE 2 - Walking for Fitness 1 unit
- PE 3 - Boot Camp Fitness Training 1 unit
- PE 10A - Body Conditioning and Physical Fitness 1 unit
- PE 47 - Introduction to Indoor Rock Climbing 1 unit
- PE 54 - Weight Training 1 unit
- PE 245 - Water Aerobics 1 unit
- PE 249 - Swimming for Fitness 1 unit
- PE 257 - Yoga for Health and Fitness 1 unit
- PE 258 - Power Vinyasa Yoga 1 unit
- PE 259 - Circuit Training 1 unit

Individual Sports:

- PE 204 - Badminton 1 unit
- PE 208 - Bowling 1 unit
- PE 224 - Golf 1 unit
- PE 251A - Beginning Tennis 1 unit

Team Sports:

- PE 4 - Basketball 1 unit
- PE 7 - Baseball 1 unit
- PE 74A - Beginning Soccer 1 unit
- PE 253 - Volleyball 1 unit
- PE 255 - Beach Volleyball 1 unit

List A: 7-9 units

- BIOL 10 - Fundamentals of Biology 4 units
or
- BIOL 10H - Honors Fundamentals of Biology 4 units

- CHEM 1A - General Chemistry I 5 units
or
- CHEM 4 - Beginning Chemistry 5 units
or
- CHEM 4H - Honors Beginning Chemistry 5 units
or
- CHEM 21A - Survey of General and Organic Chemistry 4 units

- FAID 1 - First Aid, Cardiopulmonary Resuscitation (CPR) and Basic Emergency Care 3 units
- PHYS 2A - General Physics 4 units

- MATH 150 - Elementary Statistics with Probability 4 units
or
- MATH 150H - Honors Elementary Statistics with Probability 4 units
or
- PSYC 9A - Introduction to Statistics and Data Analysis for the Behavioral Sciences 4 units
or
- SOCI 109A - Introduction to Statistics and Data Analysis for the Behavioral Sciences 4 units

Total Units: 21-25

Recommended Electives:

- CH 1 - Personal and Community Health Issues 3 units
- NFOO 11 - Nutrition 3 units
- PE 266 - Stress Management for Healthy Living 3 unit
- PE 272 - Care and Prevention of Athletic Injuries 3 units
- PE 280 - Exercise and Nutrition Programs for Fitness and Weight Management 3 units

- PSYC 5 - General Psychology 3 units
or
- PSYC 5H - Honors General Psychology 3 units

Political Science, AA-T

Behavioral and Social Sciences Division

www.elcamino.edu/academics/behavioralsocial

This degree provides students with an introduction to political science. Students will acquire knowledge of fundamental political theory, intergovernmental relations, international law, and the principal functions of the government of the United States as well as differing political systems. Upon successful program completion, students will be able to identify, explain and critically analyze different theories and political themes underlying contemporary issues and policymaking. The degree prepares students for transfer to a CSU and a political science major. Students will continue studies in government, politics and law. Competencies will be assessed regularly through examinations, essays, projects, and reports.

The Associate in Arts for Transfer (AA-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AA-T are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AA-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education - Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AA-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university.

The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AA-T.

Required Core: 3 units

- POLI 1 - Governments of the United States and California 3 units
or
- POLI 1H - Honors Governments of the United States and California 3 units

List A: 9-10 units

- POLI 2 - Introduction to Comparative Politics 3 units
- POLI 3 - Introduction to Principles and Methods of Political Science 3 units
- POLI 7 - Political Philosophy 3 units
- POLI 10 - Introduction to International Relations 3 units

- MATH 150 - Elementary Statistics with Probability 4 units
or
- MATH 150H - Honors Elementary Statistics with Probability 4 units
or
- PSYC 9A - Introduction to Statistics and Data Analysis for the Behavioral Sciences 4 units
or
- SOCI 109 - Introduction to Statistics and Data Analysis for the Behavioral Sciences 4 units

List B: 6 units

Any course from List A not already completed

- ANTH 2 - Introduction to Cultural Anthropology 3 units
- ECON 1 - Principles of Economics: Macroeconomics 3 units
- ECON 2 - Principles of Economics: Microeconomics Theory 3 units
- ESTU 1 - Introduction to Ethnic Studies 3 units
- HIST 101 - United States History to 1877 3 units
- HIST 102 - United States History from 1877 to the Present 3 units
- POLI 2 - Introduction to Comparative Politics 3 units
- POLI 3 - Introduction to Principles and Methods of Political Science 3 units
- POLI 5 - Ethnicity in the American Political Process 3 units
- POLI 6 - Civil Rights and Liberties in the United States 3 units
- POLI 7 - Political Philosophy 3 units
- POLI 10 - Introduction to International Relations 3 units
- PSYC 5 - General Psychology 3 units
- SOCI 101 - Introduction to Sociology 3 units
- WSTU 1 - Introduction to Women's Studies 3 units

Total Units: 18-19

Note: POLI 7 is the same course as PHIL 117.

Course credit is limited to POLI 7 or PHIL 117.

Psychology, AA-T

Behavioral and Social Sciences Division

www.elcamino.edu/academics/behavioralsocial

The psychology program is designed to provide students with a foundation in the science of psychology. Psychology majors will acquire the ability to survey theories critically, research the major areas of psychology, use descriptive and inferential statistics, design and conduct research, and write reports using analysis, argumentation, and proper psychological style. This major prepares students for career opportunities in fields such as teaching, research, and/or clinical practice. Competencies will be assessed regularly by evaluating student performance on exams, essays, and reports.

The Associate in Arts for Transfer (AA-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AA-T are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AA-T degree, students must complete:

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3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AA-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AA-T.

Required Core: 11 units

- PSYC 5 - General Psychology 3 units
or
- PSYC 5H - Honors General Psychology 3 units

- MATH 150 - Elementary Statistics with Probability 4 units
or
- MATH 150H - Honors Elementary Statistics with Probability 4 units
or
- PSYC 9A - Introduction to Statistics and Data Analysis for the Behavioral Sciences 4 units
or
- SOCI 109A - Introduction to Statistics and Data Analysis for the Behavioral Sciences 4 units

- PSYC 9B - Research Methods in the Behavioral Sciences 4 units

List A: 3-4 units

- BIOL 10 - Fundamentals of Biology 4 units
or
- BIOL 10H - Honors Fundamentals of Biology 4 units

- PSYC 7 - Physiological Psychology 3 units

List B: 6 units

Any list A course not already completed

- PSYC 2 - Psychology for Effective Living 3 units

- PSYC 3 - Critical Thinking and Psychology 3 units
or
- PSYC 3H - Honors Critical Thinking and Psychology 3 units

- PSYC 8 - Social Psychology 3 units
- PSYC 10 - African American Psychology 3 units
- PSYC 12 - Human Sexuality 3 units
- PSYC 15 - Abnormal Psychology 3 units
- PSYC 16 - Lifespan Development 3 units
- PSYC 17 - Cultural Psychology 3 units
- PSYC 19 - Psychology of Sexual Orientation and Gender Diversity 3 units
- PSYC 25 - The Psychology of Gender 3 units

Total Units: 20-21

Sociology, AA-T

Behavioral and Social Sciences Division

www.elcamino.edu/academics/behavioralsocial

The sociology degree provides students with a foundation in the science of sociology. Upon successful completion of the program requirements, the student will acquire an understanding of major sociological concepts and theoretical perspectives on social problems and social life as they apply to the individual, group, and society. Students will also understand the principles of research methods and data analysis. The major prepares students for transfer to four year colleges and universities as part of preparation for careers in sociology or related fields such as teaching, research, social work, public relations, and counseling. Students will demonstrate their proficiency in sociological competencies through examinations and writing assignments on the major sociological theories, topics of sociological study, and research techniques.

The Associate of Arts for Transfer (AA-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AA-T are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AA-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education - Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AA-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AA-T.

Required Core: 10 units

- SOCI 101 - Introduction to Sociology 3 units
or
- SOCI 101H - Honors Introduction to Sociology 3 units

- SOCI 104 - Social Problems 3 units

- MATH 150 - Elementary Statistics with Probability 4 units
or
- PSYC 9A - Introduction to Statistics and Data Analysis for the Behavioral Sciences 4 units
or
- SOCI 109A - Introduction to Statistics and Data Analysis for the Behavioral Sciences 4 units

List A: 6 units

- SOCI 102 - The Family 3 units
- SOCI 107 - Issues of Race and Ethnicity in the United States 3 units
- SOCI 112 - Introduction to Criminology 3 units
- PSYC 8 - Social Psychology 3 units

List B: 3 units

- ANTH 2 - Introduction to Cultural Anthropology 3 units
- ASTU 7 - History of American Popular Culture 3 units
- PSYC 12 - Human Sexuality 3 units
- PSYC 16 - Lifespan Development 3 units
- SOCI 108 - Global Perspectives on Race and Ethnicity 3 units
- SOCI 110 - Introduction to Social Work 3 units
- SOCI 113 - Gender and Society 3 units
- SOCI 115 - Sociology of Death and Dying 3 units
- SOCI 118 - Sociology of Sexualities 3 units
- WSTU 1 - Introduction to Women's Studies 3 units

Total Units: 19

Spanish, AA-T

Humanities Division

www.elcamino.edu/academics/humanities

By completing the degree requirements, the student will acquire proficiency in speaking, reading, writing, and understanding Spanish and will gain knowledge of Spanish and Spanish-American culture. The student will be able to communicate in Spanish, write formal compositions, and read the texts of Spanish and Spanish-American authors, all at the Intermediate-Mid level of competency. Competencies will be assessed throughout the language sequence with written and oral exams. This major provides opportunities for continued advanced learning of Spanish and prepares students to transfer and major in Spanish.

The Associate of Arts for Transfer (AA-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AA-T are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AA-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education - Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AA-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AA-T.

16 units from:

- SPAN 1 - Elementary Spanish I 4 units
- SPAN 2 - Elementary Spanish II 4 units

- SPAN 3 - Intermediate Spanish I 4 units
or
- SPAN 52A - Spanish for Native Speakers I 4 units

- SPAN 4 - Intermediate Spanish II 4 units
or
- SPAN 52B - Spanish for Native Speakers II 4 units

List A: 3-5 units

- SPAN 5 - Advanced Spanish I 3 units
- SPAN 6 - Advanced Spanish II 3 units
- SPAN 21 - Beginning Conversational Spanish 2 units
- SPAN 22 - Intermediate Conversational Spanish 2 units

Total Units: 19-21

Studio Arts, AA-T

Fine Arts Division

www.elcamino.edu/academics/finearts

The art program provides students with a comprehensive foundation in the history, theory, and practice of art. Each student acquires observational, compositional, technical, interpretative, and expressive competency through participation in an extensive range of studio art courses. Exposure to a culturally diverse art history curriculum prepares each student to analyze, assess, and discuss works of art from a variety of historical and style periods. Proficiencies are demonstrated through class projects, critiques, research papers, essays, and objective tests. Program assessment is measured by portfolios, juried and public exhibitions, program completion, transferability, and periodic program reviews. Students will be prepared to transfer to a CSU and major in studio arts, and pursue a variety of art-related careers.

The Associate of Arts for Transfer (AA-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AA-T are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AA-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education - Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AA-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state

university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AA-T.

Required Core: 12 units

- ART 102B - History of Western Art - Proto-Renaissance to 19th Century 3 units
- ART 110 - Drawing Fundamentals I 3 units
- ART 130 - Two-Dimensional Design I 3 units
- ART 160 - Three-Dimensional Design 3 units

List A: 3 units

- ART 102A - History of Western Art - Prehistoric to Gothic 3 units
- ART 102C - History of Western Art - 19th Century to Contemporary Times 3 units

- ART 205A - History of Asian Art - India and Southeast Asia 3 units
or
- ART 205B - History of Asian Art - China, Korea, and Japan 3 units

- ART 207 - Art History of Mexico and Central and South America 3 units
or
- ART 209 - History of African Art 3 units

List B: 9 units

- ART 129 - Fundamentals of Color 3 units
- ART 131 - Lettering and Typography I 3 units
- ART 132 - Advertising Design I 3 units
- ART 133 - Graphic Design 3 units
- ART 141 - Digital Art Fundamentals 3 units
- ART 143 - Digital Publishing Fundamentals 3 units
- ART 144 - 3D Modeling and Animation 3 units
- ART 152 - Rendering 3 units
- ART 161 - Beginning Ceramics 3 units
- ART 173 - Introduction to Jewelry and Metalsmithing 3 units
- ART 181 - Beginning Sculpture 3 units
- ART 187 - Printmaking I - Etching and Relief 3 units

- ART 210 - Drawing Fundamentals II 3 units
or
- ART 217 - Life Drawing I 3 units

- ART 218 - Life Drawing II 3 units
- ART 219 - Watercolor Painting I 3 units
- ART 220 - Watercolor Painting II 3 units
- ART 222 - Fundamentals of Painting I 3 units
- ART 223A - Fundamentals of Painting II 3 units
- ART 223B - Fundamentals of Painting III 3 units
- ART 224 - Life Painting I 3 units
- ART 225A - Life Painting II 3 units
- ART 230 - Two-Dimensional Design II 3 units
- ART 231 - Lettering and Typography II 3 units
- ART 232 - Advertising Design II 3 units
- ART 262 - Intermediate Ceramics 3 units
- ART 274 - Jewelry Fabrication 3 units
- ART 282 - Life Sculpture 3 units
- ART 283 - Bronze Casting 3 units
- ART 288 - Printmaking II - Etching and Relief 3 units
- ART 289 - Lithography 3 units
- ART 290 - Screen Printing 3 units
- PHOT 101 - Elementary Photography 2 units
- PHOT 102 - Basic Photography 3 units
- PHOT 202 - Intermediate Photography 4 units

Total Units: 24

Theatre Arts, AA-T

Fine Arts Division

www.elcamino.edu/academics/finearts

The theatre program provides students with a comprehensive foundation in theatre, history, practice of theatre, and entertainment lighting. This is fulfilled through a structured program of theatre study in the areas of history, dramatic literature, acting, performance, technical theatre, entertainment lighting, and related crafts. Students will demonstrate their proficiency through acting competency, public performance, research papers, essays, class projects, and technical crew assignments. Program assessment is measured by public performances, program completion, transferability, and periodic program review. Students qualify to pursue a variety of theatre and entertainment related careers and advanced degree options. This program prepares students to transfer to a CSU and major in Theatre, Theatre Arts, or Drama.

The Associate of Arts for Transfer (AA-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AA-T are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AA-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education - Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AA-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AA-T.

Required Core: 9 units

- THEA 103 - Theatre Appreciation 3 units
- THEA 114 - Fundamentals of Acting 3 units

Select a maximum of 3 units from Rehearsal and Performance or from Technical Theatre Practicum courses.

Rehearsal and Performance: 3 units

- THEA 175abcd - Student Performance Production Workshop 1 unit
- THEA 270abcd - Beginning Theatre Production 1 unit
- THEA 274abcd - Musical Theatre Production 1 unit

Technical Theatre Practicum: 3 units

- THEA 197abcd - Technical Theatre Production 1 unit
- THEA 297ab - Advanced Technical Theatre Production 1 unit

List A: 9 units

If not used in core requirements, select a maximum of 3 units from Rehearsal and Performance or Technical Theatre Practicum courses.

- THEA 104 - Dramatic Literature 3 units
- THEA 175abcd - Student Performance Production Workshop 1 unit
- THEA 184 - Stagecraft 3 units
- THEA 185 - Introduction to Stage Lighting 3 units
- THEA 188 - Fundamentals of Stage Makeup 3 units
- THEA 189 - Costuming for the Stage 3 units
- THEA 197abcd - Technical Theatre Production 1 unit
- THEA 214A - Intermediate Acting 3 units
- THEA 270abcd - Beginning Theatre Production 1 unit
- THEA 274abcd - Musical Theatre Production 1 unit
- THEA 297ab - Advanced Technical Theatre Production 1 unit

Total Units: 18

Accounting, AS

Business Division

www.elcamino.edu/academics/business

By completing the degree or certificate requirements of the accounting program, students will acquire the ability to apply the fundamental theory, principles, and practices of the accounting cycle for unincorporated and corporate forms of business, financial, and managerial accounting theory as well as cost accounting and cost procedures used in business and industry. The student will also learn income tax regulations pertaining to individual and business income tax preparations and planning. Competencies will be assessed regularly through examinations and comprehensive problems. The major provides career opportunities in entry-level accounting positions.

For Gainful Employment program information for the Business program options offered at El Camino College, please visit www.elcamino.edu/academics/business/accounting.

Required Courses:

- BUS 1A - Financial Accounting 4 units
- BUS 1B - Managerial Accounting 4 units
- BUS 2A - Intermediate Accounting 3 units
- BUS 2B - Intermediate Accounting 3 units
- BUS 4 - Cost Accounting 3 units
- BUS 5A - Income Tax Accounting 4 units
- CIS 13 - Computer Information Systems 3 units
- LAW 5 - Business Law 3 units

Total Units: 27

Air Conditioning and Refrigeration, AS

Industry and Technology Division

www.elcamino.edu/academics/indtech

The air conditioning and refrigeration program prepares students for employment in the field and provides upgrade opportunities for currently employed personnel. By completing the degree or certificate requirements, the student will gain proficiency in service, troubleshooting, installation, and energy efficient operation of residential, commercial and industrial heating, air conditioning, refrigeration, and control systems. Students will learn to read wiring diagram, diagnose control circuits, operate test equipment, and service pneumatic, electric and electronic controls. Competencies will be assessed in accordance with the Environmental Protection Agency certificate criteria. Students completing the program may expect to enter industry as an advanced apprentice or entry-level heating, ventilation, air conditioning, and controls technician.

At least 50 percent of the major requirements for the Associate in Science degree must be completed at El Camino College. For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/acr

Required Core:

- ACR 5 - Electrical Applications 4 units
- ACR 6 - Refrigeration and Air Conditioning Control Systems 4 units
- ACR 21 - Air Conditioning Fundamentals 4 units
- ACR 23 - Commercial Refrigeration Applications 4 units
- ACR 25 - Energy Efficient Residential, Commercial and Industrial Air Conditioning 4 units
- ACR 27 - Heating Technologies 4 units
- ACR 30 - Electric Controls 2 units
- ACR 31 - HVAC Electronics 2 units
- ACR 34 - HVAC Customer Service and Industry Certifications 1 unit
- ACR 61 - Fundamentals of Automation Systems 3 units
- ACR 62 - Energy Control and Optimization Systems 4 units

Total Units: 36

Recommended Electives:

- ACR 95 - Cooperative Work Experience Education 2-4 units
- BUS 15 - Business Mathematics 3 units
- CIS 13 - Computer Information Systems 3 units
- CTEC 100 - Building Fundamentals 4 units

Architecture, AS

Industry and Technology Division

www.elcamino.edu/academics/indtech

The architecture program prepares students for transfer or for employment in the field. By completing the degree or certificate requirements, the student will gain proficiency in manual and computer aided drafting (CAD) fundamentals, three-dimensional drawing, model making, and structural analysis of buildings. Students will learn to interpret the Uniform Building Code and local planning and zoning ordinances. Competencies will be assessed in accordance with the American Institute of Architects (A.I.A.) certification criteria. Students completing the program may expect to enter industry as an entry-level CAD draftsman in an architecture firm or transfer to a university architecture program.

At least 50 percent of the major requirements for the Associate in Science degree must be completed at El Camino College. For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/architecture.

Required Core: 23 units

- ARCH 100 - An Orientation to Architecture 1 unit
- ARCH 107 - World Architecture: Pre-History to Middle Ages 3 units
- ARCH 108 - World Architecture: Gothic to Early Modern 3 units
- ARCH 119 - Computer Aided Architectural Drafting 3 units
- ARCH 150A - Construction Documentation I 3 units
- ARCH 150B - Construction Documentation II 3 units
- ARCH 170 - Architectural Graphics Techniques 3 units
- ARCH 171 - Architectural Three-Dimensional Illustration 3 units
- ARCH 199 - Architecture Design Studio 4 units

12-13 units from:

- ARCH 121 - Building Information Modeling I 3 units
- ARCH 125 - Building Information Modeling II 3 units
- ARCH 158 - Structures Analysis - Timber 3 units
- ARCH 172 - Architectural Color Rendering Techniques 3 units
- ARCH 179 - Design/Build Studio 4 units
- ET 165 - Sustainable and Regenerative Practices in Site and Landscape Development 3 units

Total Units: 38-39

Preparation for the Architecture Transfer Major

For information on specific university major requirements, please obtain a transfer curriculum guide sheet in the Counseling Services Center, consult with your counselor, or visit the Transfer Center. You may use the transfer major requirements to help you fulfill your associate degree requirements.

Associate of Science Degree

Section A - General Education Requirements

A student has three options to complete the General Education Requirements.

Option I is designed for students completing the El Camino College major.

Option II is designed for students completing CSU GE Breadth transfer requirements.

Option III is designed for students completing CSU/UC (IGETC) transfer requirements.

Option I: El Camino College Requirements

Complete the specified number of units in categories 1 through 5 and the mathematics competency requirement in category 6.

1. Natural Sciences:

minimum 3 semester units

- ANAT 30 - Essentials of Anatomy and Physiology 4 units
- ANAT 32 - General Human Anatomy 4 units
- APHY 34A - Anatomy and Physiology I 4 units
- APHY 34B - Anatomy and Physiology II 4 units
- ANTH 1 - Introduction to Physical Anthropology 3 units
- ANTH 5 - Physical Anthropology Laboratory 1 unit
- ASTR 12 - Astronomy Laboratory 1 unit
- ASTR 20 - The Solar System 3 units
- ASTR 20H - Honors The Solar System 3 units
- ASTR 25 - Stars and Galaxies 3 units
- ASTR 25H - Honors Stars and Galaxies 3 units

- BIOL 8 - Biology of Plants 4 units
- BIOL 10 - Fundamentals of Biology 4 units
- BIOL 10H - Honors Fundamentals of Biology 4 units
- BIOL 11 - Fundamentals of Zoology 4 units
- BIOL 12 - Field Zoology 4 units
- BIOL 15 - Environmental Aspects of Biology 3 units
- BIOL 16 - Field Entomology 4 units
- BIOL 17 - Marine Biology 3 units
- BIOL 18 - Marine Biology Laboratory 1 unit
- BIOL 101 - Principles of Biology I 5 units
- BIOL 101H - Honors Principles of Biology I 5 units
- BIOL 102 - Principles of Biology II 5 units
- BIOL 102H - Honors Principles of Biology II 5 units
- BIOL 103 - Fundamentals of Molecular Biology 3 units
- CHEM 1A - General Chemistry I 5 units
- CHEM 1B - General Chemistry II 5 units
- CHEM 4 - Beginning Chemistry 5 units
- CHEM 7A - Organic Chemistry I 5 units
- CHEM 7B - Organic Chemistry II 5 units
- CHEM 20 - Fundamentals of Chemistry 5 units
- CHEM 21A - Survey of General and Organic Chemistry 4 units
- CHEM 21B - Survey of Organic and Biochemistry 4 units
- GEOG 1 - Physical Geography 3 units
- GEOG 6 - Physical Geography Laboratory 1 unit
- GEOG 9 - Weather and Climate 3 units
- GEOL 1 - Physical Geology 3 units
- GEOL 2 - History of Planet Earth 3 units
- GEOL 3 - Physical Geology Laboratory 1 unit
- GEOL 4 - History of Planet Earth Laboratory 1 unit
- GEOL 6 - Earth Science in Education 4 units
- GEOL 7 - Environmental Science I 3 units
- GEOL 15 - Natural Disasters 3 units
- GEOL 30 - Geology Laboratory of Death Valley 1 unit
- GEOL 32 - Geology Laboratory of Owens Valley and Sierra Nevada 1 unit
- GEOL 34 - Geology Laboratory of Southeastern California 1 unit
- GEOL 36 - Geology Laboratory of Coastal California 1 unit
- MICR 33 - General Microbiology 5 units
- OCEA 10 - Introduction to Oceanography 4 units
- OCEA 10H - Honors Introduction to Oceanography 4 units
- PSCI 25 - Exploring Physical Sciences 3 units
- PHYS 1A - Mechanics of Solids 4 units
- PHYS 1B - Fluids, Heat and Sound 3 units
- PHYS 1C - Electricity and Magnetism 4 units
- PHYS 1D - Optics and Modern Physics 4 units
- PHYS 2A - General Physics 4 units
- PHYS 2B - General Physics 4 units
- PHYS 3A - General Physics with Calculus 5 units
- PHYS 3B - General Physics with Calculus 5 units
- PHYS 11 - Descriptive Introduction to Physics 3 units
- PHYS 12 - Laboratory for Introductory Physics 1 unit
- PHYO 31 - Human Physiology 4 units
- PSYC 7 - Physiological Psychology 3 units

2. Social and Behavioral Science:

minimum 3 semester units

One course from A or B, or C:

A.

- ASTU 7 - History of American Popular Culture 3 units
- COMS 275 - Gender Communication 3 units
- HIST 101 - United States History to 1877 3 units
- HIST 101H - Honors United States History to 1877 3 units
- HIST 102 - United States History from 1877 to the Present 3 units

- HIST 102H - Honors United States History from 1877 to the Present 3 units
- HIST 105 - Women and American History from the Colonial Era to 1877 3 units
- HIST 106 - Women and American History from 1877 to the Present 3 units
- HIST 108 - United States History: The American Indian Experience 3 units
- HIST 110 - The African American in the United States to 1877 3 units
- HIST 111 - The African American in the United States from 1877 to the Present 3 units
- HIST 112 - History of the Chicano in the United States 3 units
- HIST 122 - United States Social History: Cultural Pluralism in America 3 units
- HIST 122H - Honors United States Social History: Cultural Pluralism in America 3 units
- HIST 128 - History of California 3 units
- SSCI 103 - Introduction to Social Justice Studies 3 units
- WSTU 1 - Introduction to Women's Studies 3 units

B.

- PHIL 117 - Political Philosophy 3 units
- POLI 1 - Governments of the United States and California 3 units
- POLI 1H - Honors Governments of the United States and California 3 units
- POLI 5 - Ethnicity in the American Political Process 3 units
- POLI 6 - Civil Rights and Liberties in the United States 3 units
- POLI 7 - Political Philosophy 3 units
- SSCI 103 - Introduction to Social Justice Studies 3 units

C.

- ANTH 2 - Introduction to Cultural Anthropology 3 units
- ANTH 3 - Introduction to Archaeology 3 units
- ANTH 4 - Language and Culture 3 units
- ANTH 6 - Native Peoples of North America 3 units
- ANTH 7 - Native Peoples of South America 3 units
- ANTH 8 - Ancient Civilizations of Mesoamerica 3 units
- ANTH 9 - Women, Culture, and Society 3 units
- ANTH 11 - Anthropology of Religion, Magic and Witchcraft 3 units
- BUS 22 - Human Relations in Organizations 3 units
- CDEV 103 - Child Growth and Development 3 units
- CDEV 104 - The Home, The School, The Community 3 units
- COMS 260 - Introduction to Intercultural Communication 3 units
- COMS 265 - Mass Communication 3 units
- COMS 270 - Organizational Communication 3 units
- ECON 1 - Principles of Economics: Macroeconomics 3 units
- ECON 1H - Honors Principles of Economics: Macroeconomics 3 units
- ECON 2 - Principles of Economics: Microeconomics Theory 3 units
- ECON 5 - Fundamentals of Economics 3 units
- ESTU 1 - Introduction to Ethnic Studies 3 units
- ESTU 3 - The Chicano in Contemporary United States Society 3 units
- ESTU 5 - Chicano Culture 3 units
- FILM 100 - Introduction to Electronic Media 3 units
- GEOG 2 - Cultural Geography 3 units
- GEOG 5 - World Regional Geography 3 units
- GEOG 7 - Geography of California 3 units
- HIST 129 - History of Los Angeles 3 units
- HIST 140 - History of Early Civilizations 3 units
- HIST 141 - History of Modern Civilizations 3 units
- HIST 152 - History of Latin America through Independence 3 units
- HIST 154 - A History of Mexico 3 units
- JOUR 12 - Mass Media and Society 3 units
- PHIL 117 - Political Philosophy 3 units
- POLI 2 - Introduction to Comparative Politics 3 units
- POLI 3 - Introduction to Principles and Methods of Political Science 3 units
- POLI 7 - Political Philosophy 3 units
- POLI 10 - Introduction to International Relations 3 units
- POLI 10H - Honors Introduction to International Relations 3 units
- PSYC 2 - Psychology for Effective Living 3 units
- PSYC 5 - General Psychology 3 units
- PSYC 5H - Honors General Psychology 3 units
- PSYC 7 - Physiological Psychology 3 units

- PSYC 8 - Social Psychology 3 units
- PSYC 10 - African American Psychology 3 units
- PSYC 12 - Human Sexuality 3 units
- PSYC 15 - Abnormal Psychology 3 units
- PSYC 16 - Lifespan Development 3 units
- PSYC 17 - Cultural Psychology 3 units
- SOCI 101 - Introduction to Sociology 3 units
- SOCI 101H - Honors Introduction to Sociology 3 units
- SOCI 102 - The Family 3 units
- SOCI 104 - Social Problems 3 units
- SOCI 107 - Issues of Race and Ethnicity in the United States 3 units
- SOCI 108 - Global Perspectives on Race and Ethnicity 3 units
- SOCI 112 - Introduction to Criminology 3 units
- SOCI 113 - Gender and Society 3 units
- SSCI 101 - Introduction to Social Sciences 3 units
- SSCI 103 - Introduction to Social Justice Studies 3 units

3. Humanities:

minimum 3 semester units

- ARCH 104 - History of Western Architecture 3 units
- ART 101 - Art and Visual Culture: A Global Perspective 3 units
- ART 102A - History of Western Art - Prehistoric to Gothic 3 units
- ART 102AH - Honors History of Western Art - Prehistoric to Gothic 3 units
- ART 102B - History of Western Art - Proto-Renaissance to 19th Century 3 units
- ART 102C - History of Western Art - 19th Century to Contemporary Times 3 units
- ART 106 - Cross-Cultural Art 3 units
- ART 109 - Contemporary Art in World Cultures 3 units
- ART 150 - The Art of Photography 3 units
- ART 205A - History of Asian Art - India and Southeast Asia 3 units
- ART 205B - History of Asian Art - China, Korea, and Japan 3 units
- ART 207 - Art History of Mexico and Central and South America 3 units
- ART 208 - History of American Art 3 units
- ART 208H - Honors History of American Art 3 units
- ART 209 - History of African Art 3 units
- CHIN 1 - Elementary Chinese I 4 units
- CHIN 2 - Elementary Chinese II 4 units
- CHIN 3 - Intermediate Chinese I 4 units
- CHIN 24 - Introduction to Chinese Language and Culture 3 units
- COMS 250 - Oral Interpretation of Literature 3 units
- DANC 101 - Dance Appreciation 3 units
- DANC 103 - History of Dance in the 20th Century 3 units
- ENGL 1B - Literature and Composition 3 units
- ENGL 1BH - Honors Literature and Composition 3 units
- ENGL 12 - Introduction to Fiction 3 units
- ENGL 15A - Survey of British Literature I 3 units
- ENGL 15B - Survey of British Literature II 3 units
- ENGL 20 - Shakespeare's Plays - Tragedies and Romances 3 units
- ENGL 21 - Shakespeare's Plays - Comedies and Histories 3 units
- ENGL 23A - Introduction to Creative Nonfiction 3 units
- ENGL 27 - Children's Literature 3 units
- ENGL 28 - Images of Women in Literature 3 units
- ENGL 30 - The English Bible as Literature 3 units
- ENGL 31 - Mythology and Folklore 3 units
- ENGL 34 - The Short Story 3 units
- ENGL 35 - World Literature: 3500 BCE to 1650 CE 3 units
- ENGL 36 - World Literature: 1650 CE to Present 3 units
- ENGL 39 - Literature and Film 3 units
- ENGL 40A - American Literature I 3 units
- ENGL 40B - American Literature II 3 units
- ENGL 41B - Survey of Film: 1950 to the Present 3 units
- ENGL 42 - Chicano and Latino Literature 3 units
- ENGL 43 - African American Literature 3 units
- ENGL 44 - The Literature of American Ethnic Groups 3 units

- ENGL 48 - Modern Literature of Latin America 3 units
- FASH 31 - History of Costume 3 units
- FILM 105 - Media Aesthetics 3 units
- FILM 110 - Film Appreciation 3 units
- FILM 113 - Screenplay Analysis 3 units
- FILM 114 - Story Development 3 units
- FILM 153 - American Independent Cinema 3 units
- FILM 154 - Regional Cinemas 3 units
- FREN 1 - Elementary French I 4 units
- FREN 2 - Elementary French II 4 units
- FREN 3 - Intermediate French I 4 units
- FREN 4 - Intermediate French II 4 units
- FREN 5 - Advanced French I 3 units
- FREN 6 - Advanced French II 3 units
- GERM 1 - Elementary German I 4 units
- GERM 2 - Elementary German II 4 units
- GERM 3 - Intermediate German I 4 units
- HUMA 1 - An Introduction to the Humanities 3 units
- ITAL 1 - Elementary Italian I 4 units
- ITAL 2 - Elementary Italian II 4 units
- ITAL 24 - Introduction to Italian Culture 3 units
- JAPA 1 - Elementary Japanese I 4 units
- JAPA 2 - Elementary Japanese II 4 units
- JAPA 3 - Intermediate Japanese I 4 units
- JAPA 4 - Intermediate Japanese II 4 units
- JAPA 25 - Cultural Aspects of the Japanese Language 3 units
- MUSI 101 - Music Fundamentals 3 units
- MUSI 111 - Music Appreciation Survey 3 units
- MUSI 112 - Music Cultures of the World 3 units
- MUSI 112H - Honors Music Cultures of the World 3 units
- MUSI 113 - Survey of Jazz 3 units
- MUSI 116 - History of Rock Music 3 units
- MUSI 117 - Music of the Beatles 3 units
- MUSI 215A - Music History and Literature up to 1750 3 units
- MUSI 215B - Music History and Literature - 1750 to Present 3 units
- PHIL 101 - Introduction to Philosophy 3 units
- PHIL 101H - Honors Introduction to Philosophy 3 units
- PHIL 103 - Ethics and Society 3 units
- PHIL 107 - Philosophy of Religion 3 units
- PHIL 111 - History of Ancient and Medieval Philosophy 3 units
- PHIL 112 - History of Modern Philosophy 3 units
- PHIL 113 - Contemporary Philosophy 3 units
- PHIL 114 - Asian Philosophy 3 units
- PHIL 115 - Existentialism 3 units
- PHIL 117 - Political Philosophy 3 units
- PHIL 120 - Ethics, Law and Society 3 units
- PHOT 150 - The Art of Photography 3 units
- POLI 7 - Political Philosophy 3 units
- SLAN 111 - American Sign Language I 4 units
- SLAN 112 - American Sign Language II 4 units
- SLAN 113 - American Sign Language III 4 units
- SLAN 114 - American Sign Language IV 4 units
- SLAN 115 - American Sign Language V 4 units
- SLAN 130 - Deaf Culture 3 units
- SLAN 131 - Perspective on Deafness 3 units
- SPAN 1 - Elementary Spanish I 4 units
- SPAN 1H - Honors Elementary Spanish I 4 units
- SPAN 2 - Elementary Spanish II 4 units
- SPAN 3 - Intermediate Spanish I 4 units
- SPAN 4 - Intermediate Spanish II 4 units
- SPAN 5 - Advanced Spanish I 3 units
- SPAN 6 - Advanced Spanish II 3 units

- SPAN 52A - Spanish for Native Speakers I 4 units
- SPAN 52B - Spanish for Native Speakers II 4 units
- THEA 103 - Theatre Appreciation 3 units
- THEA 104 - Dramatic Literature 3 units
- THEA 113 - Introduction to Acting 3 units

4. Language and Rationality:

minimum 6 semester units

One course from A and one course from B:

A. English Composition:

minimum 3 semester units

- BUS 27 - Effective English for Business 3 units
- BUS 28 - Written Business Communications 3 units
- ENGL 1A - Reading and Composition 4 units
- ENGL 1AH - Honors Reading and Composition 4 units
- JOUR 1 - News Writing and Reporting 3 units

B. Communication and Analytical Thinking:

minimum 3 semester units

- BUS 29 - Oral Business Communications 3 units
- COMS 100 - Public Speaking 3 units
- COMS 120 - Argumentation and Debate 3 units
- COMS 130 - Interpersonal Communication 3 units
- COMS 140 - Small Group Communication 3 units
- COMS 260 - Introduction to Intercultural Communication 3 units
- COMS 265 - Mass Communication 3 units
- COMS 270 - Organizational Communication 3 units
- CIS 13 - Computer Information Systems 3 units
- CIS 16 - Application Development and Programming Using Visual Basic.Net 3 units
- CIS 80 - Database Programming 4 units
- CSCI 1 - Problem Solving and Program Design Using C++ 4 units
- CSCI 7 - The Beauty of Computer Science Principles 4 units
- CSCI 14 - Computer Programming in Python for Computer Science 4 units
- ENGL 1B - Literature and Composition 3 units
- ENGL 1BH - Honors Literature and Composition 3 units
- ENGL 1C - Critical Thinking and Composition 3 units
- ENGL 1CH - Honors Critical Thinking and Composition 3 units
- JOUR 12 - Mass Media and Society 3 units
- MATH 73 - Intermediate Algebra for General Education 5 units
- MATH 80 - Intermediate Algebra for Science, Technology, Engineering, and Mathematics 5 units
- MATH 110 - Structures and Concepts in Mathematics 3 units
- MATH 115 - Probability and Statistics for Prospective Elementary School Teachers 3 units
- MATH 116 - Geometry and Measurement for Prospective Elementary School Teachers 3 units
- MATH 120 - Nature of Mathematics 3 units
- MATH 130 - College Algebra 3 units
- MATH 140 - Finite Mathematics for Business and Social Sciences 4 units
- MATH 150 - Elementary Statistics with Probability 4 units
- Mathematics 160
- Mathematics 161
- MATH 165 - Calculus for Business and Social Sciences 5 units
- MATH 170 - Trigonometry 3 units
- MATH 180 - Pre-Calculus 5 units
- MATH 190 - Single Variable Calculus and Analytic Geometry I 5 units
- MATH 191 - Single Variable Calculus and Analytic Geometry II 5 units
- MATH 210 - Introduction to Discrete Structures 5 units
- MATH 220 - Multi-Variable Calculus 5 units
- MATH 270 - Differential Equations with Linear Algebra 5 units
- PHIL 105 - Critical Thinking and Discourse 3 units
- PHIL 105H - Honors Critical Thinking and Discourse 3 units
- PHIL 106 - Introduction to Symbolic Logic 3 units
- PSYC 3 - Critical Thinking and Psychology 3 units
- PSYC 3H - Honors Critical Thinking and Psychology 3 units
- PSYC 9A - Introduction to Statistics and Data Analysis for the Behavioral Sciences 4 units
- Sociology 109
- SUPV 27 - Oral Business Communications 3 units

5. Health and Physical Education:

minimum 3 semester units

(This category may be exempted by one of the following:

1. Pass the Contemporary Health waiver exam; or
 2. Approval of a petition for military service credit; or
 3. Completion of NURS 151 and NURS 146.)
- CH 1 - Personal and Community Health Issues 3 units
 - CH 5 - Contemporary Women's Health 3 units
 - HDEV 110 - Strategies for Creating Success in College and in Life 3 units
 - HDEV 115 - Career Development Across the Lifespan 3 units
 - NFOO 11 - Nutrition 3 units
 - PSYC 2 - Psychology for Effective Living 3 units
 - PSYC 16 - Lifespan Development 3 units
 - PE 260 - Basic Principles of Fitness and Weight Control 1 unit

Physical Activity or Fitness Courses:

Dance

- DANC 110 - Beginning Dance 2 units
- DANC 120A - Beginning Ballet A 2 units
- DANC 120B - Beginning Ballet B 2 units
- DANC 130A - Beginning Modern Dance A 2 units
- DANC 130B - Beginning Modern Dance B 2 units
- DANC 140 - Jazz Dance I 2 units
- DANC 161 - Tap Dance I - Beginning 1 unit
- DANC 162 - Hip Hop Dance 2 units
- DANC 164 - World Dance 1 unit
- DANC 165 - African Dance 1 unit
- DANC 167 - Social and Ballroom Dance 1 unit
- DANC 168 - Latin Social Dance 2 units
- DANC 171A - Beginning Choreography A 2 units
- DANC 220A - Intermediate Ballet A 2 units
- DANC 221 - Ballet Variations 2 units
- DANC 230A - Intermediate Modern Dance A 2 units
- DANC 240 - Jazz Dance II 2 units
- DANC 250 - Pilates Mat Class 3 units
- DANC 261 - Tap Dance II - Intermediate 2 units
- DANC 262 - Commercial Dance 2 units
- DANC 265 - Intermediate African Dance 2 units
- DANC 268 - Intermediate Latin Social Dance 2 units
- DANC 271A - Intermediate Choreography A 2 units

Physical Education

- PE 2 - Walking for Fitness 1 unit
- PE 3 - Boot Camp Fitness Training 1 unit
- PE 4 - Basketball 1 unit
- PE 5abc - Men's Intercollegiate Baseball Team 3 units
- PE 6abc - Off-Season Training For Men's Intercollegiate Baseball Team 1 unit
- PE 7 - Baseball 1 unit
- Physical Education 10
- PE 15abc - Men's Intercollegiate Basketball Team 3 units
- PE 16abc - Off-Season Training for Men's Intercollegiate Basketball Team 1 unit
- PE 18A - Beginning Boxing 1 unit
- PE 20abc - Intercollegiate Cross Country Teams 3 units
- PE 21abc - Off-Season Training for Intercollegiate Cross Country Teams 1 unit
- PE 35abc - Men's Intercollegiate Football Team 3 units
- PE 36abc - Off-Season Training for Men's Intercollegiate Football Team 1 unit
- PE 45abc - Men's Intercollegiate Golf Team 3 units
- PE 46abc - Off-Season Training for Men's Intercollegiate Golf Team 1 unit
- PE 47 - Introduction to Indoor Rock Climbing 1 unit
- PE 54 - Weight Training 1 unit
- PE 57abc - Intercollegiate Swimming Teams 3 units
- PE 58abc - Off-Season Training for Intercollegiate Swimming Teams 1 unit
- PE 60abc - Women's Intercollegiate Soccer Team 3 units
- PE 61abc - Off-Season Training for Women's Intercollegiate Soccer Team 1 unit

- Physical Education 65abc
- PE 66abc - Off-Season Training for Men's Intercollegiate Tennis Team 1 unit
- PE 70abc - Men's Intercollegiate Soccer Team 3 units
- PE 71abc - Off-Season Training for Men's Intercollegiate Soccer Team 1 unit
- Physical Education 74
- PE 75abc - Intercollegiate Track and Field Teams 3 units
- PE 76abc - Off-Season Training for Intercollegiate Track and Field Teams 1 unit
- PE 80abc - Men's Intercollegiate Volleyball Team 3 units
- PE 81abc - Off-Season Training for Men's Intercollegiate Volleyball Team 1 unit
- PE 85abc - Men's Intercollegiate Water Polo Team 3 units
- PE 86abc - Off-Season Training for Men's Intercollegiate Water Polo Team 1 unit
- PE 87abc - Women's Intercollegiate Water Polo Team 3 units
- PE 105abc - Women's Intercollegiate Basketball Team 3 units
- PE 106abc - Off-Season Training for Women's Intercollegiate Basketball Team 1 unit
- PE 110abc - Women's Intercollegiate Volleyball Team 3 units
- PE 111abc - Off-Season Training for Women's Intercollegiate Volleyball Team 1 unit
- PE 115abc - Intercollegiate Tennis Teams 3 units
- PE 116abc - Off-Season Training for Women's Intercollegiate Tennis Team 1 unit
- PE 120abc - Women's Intercollegiate Softball Team 3 units
- PE 121abc - Off-Season Training for Women's Intercollegiate Softball Team 1 unit
- PE 132abc - Women's Intercollegiate Badminton Team 3 units
- PE 133abc - Off-Season Training for Women's Intercollegiate Badminton Team 1 unit
- PE 135abcd - Sport-Specific, Periodized Training for Athletes 1 unit
- PE 140abc - Intercollegiate Sand Volleyball Team 3 units
- PE 204 - Badminton 1 unit
- PE 208 - Bowling 1 unit
- PE 221 - Combative Arts and Self Defense 1 unit
- PE 224 - Golf 1 unit
- PE 233 - Pep Squad and Cheer 1 unit
- PE 234ab - Pep Squad and Cheer Competition 1 unit
- PE 240A - Beginning Swimming 1 unit
- PE 240B - Intermediate Swimming 1 unit
- PE 240C - Advanced Swimming 1 unit
- PE 245 - Water Aerobics 1 unit
- PE 249 - Swimming for Fitness 1 unit
- PE 250 - Techniques of Surfboard Riding 1 unit
- PE 251A - Beginning Tennis 1 unit
- PE 253 - Volleyball 1 unit
- PE 254 - Cardio Fitness and Body Sculpting 1 unit
- PE 255 - Beach Volleyball 1 unit
- PE 257 - Yoga for Health and Fitness 1 unit
- PE 258 - Power Vinyasa Yoga 1 unit
- PE 259 - Circuit Training 1 unit
- PE 266 - Stress Management for Healthy Living 3 unit
- PE 275 - Sport Psychology 3 units
- PE 280 - Exercise and Nutrition Programs for Fitness and Weight Management 3 units
- PE 400 - Adapted Fitness 1 unit
- PE 401 - Adapted Strength Training 1 unit
- PE 402 - Adapted Swimming and Hydroexercise 1 unit
- PE 404 - Adapted Cardiovascular Fitness 1 unit
- PE 407 - Adapted Bowling 1 unit
- PE 409 - Adapted Yoga 1 unit

6. Mathematics Competency

Pass the Mathematics Competency Test (a process separate from mathematics placement), which covers intermediate algebra, or satisfactorily complete one of the approved courses for this category.

- MATH 73 - Intermediate Algebra for General Education 5 units
- MATH 80 - Intermediate Algebra for Science, Technology, Engineering, and Mathematics 5 units
- MATH 110 - Structures and Concepts in Mathematics 3 units
- MATH 115 - Probability and Statistics for Prospective Elementary School Teachers 3 units
- MATH 116 - Geometry and Measurement for Prospective Elementary School Teachers 3 units
- MATH 120 - Nature of Mathematics 3 units
- MATH 130 - College Algebra 3 units

- MATH 140 - Finite Mathematics for Business and Social Sciences 4 units
- MATH 150 - Elementary Statistics with Probability 4 units
- MATH 165 - Calculus for Business and Social Sciences 5 units
- MATH 170 - Trigonometry 3 units
- MATH 180 - Pre-Calculus 5 units
- MATH 190 - Single Variable Calculus and Analytic Geometry I 5 units
- MATH 191 - Single Variable Calculus and Analytic Geometry II 5 units
- MATH 210 - Introduction to Discrete Structures 5 units
- MATH 220 - Multi-Variable Calculus 5 units
- MATH 270 - Differential Equations with Linear Algebra 5 units
- PSYC 9A - Introduction to Statistics and Data Analysis for the Behavioral Sciences 4 units
- SOCI 109A - Introduction to Statistics and Data Analysis for the Behavioral Sciences 4 units

Option II: CSU GE Breadth Transfer Requirements

See CSU GE Breadth Transfer Requirements.

Option III: CSU/UC (IGETC) Transfer Requirements

See CSU/UC (IGETC) Transfer Requirements.

Section B - Major Requirements

Satisfy either the El Camino College Major option or the Transfer Major option.

El Camino College Major

Complete the courses specified for one of the majors listed alphabetically in Section IV, Curriculum, of this college catalog.

Transfer Major

Complete the lower division transfer major requirements for an accredited four-year college or university. If there are no lower division requirements in the transfer major or if the requirements for the transfer major are less than 18 units, students must complete an El Camino College major.

Section C - Electives

El Camino College Major

To reach the total of 60 degree applicable units required for graduation, students must choose electives from degree applicable courses. Students may count only six units of physical education as elective credit for graduation.

Transfer Major

Sixty degree applicable units are required for graduation. To qualify for transfer to CSU or UC, electives must be chosen from transferable courses. Students may count only four units of physical education as transfer credit.

Astronomy, AS

Natural Sciences Division

www.elcamino.edu/academics/naturalsciences

The degree is designed for students planning to transfer with a major in astronomy. The student will acquire the ability to use problem solving strategies that apply to physical concepts involving mechanics, thermodynamics, sounds, light, electricity and magnetism, and modern physics. Laboratory activities will provide the student with a foundation in measurement and analysis techniques necessary to test, understand and apply physical concepts. Competencies will be assessed by evaluating the student's ability to quantitatively and qualitatively determine the results of physical situations.

Preparation for the Astronomy Transfer Major

For information on specific university major requirements, please obtain a transfer curriculum guide sheet in the Counseling Services Center, consult with your counselor, or visit the Transfer Center. You may use the transfer major requirements to help you fulfill your associate degree requirements.

Automotive Collision Repair/Painting, AS

Industry and Technology Division

www.elcamino.edu/academics/indtech

The automotive collision repair/painting program prepares students for employment in the field and provides upgrade opportunities for currently employed personnel. By completing the degree requirements, students will gain proficiency in industry repair standards, vehicle identification and construction, estimating, body repairs, frame repairs, vehicle alignment, welding, and vehicle painting. In addition, completing the certificate requirements prepares students for employment in the fields of automotive insurance investigation, vehicle accident reconstruction, automotive collision repair, or automotive painting. Competencies will be assessed regularly by student performance in the automotive collision repair/painting classroom and laboratory.

At least 50 percent of the major requirements for the Associate in Science degree must be completed at El Camino College. For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/autocollision.

Complete a minimum of 20 units from:

- ACRP 1A - Introduction to Automotive Collision Repair 8 units
- ACRP 1B - Collision Repair Equipment and Welding Techniques 8 units
- ACRP 1C - Major Collision Analysis and Repair 8 units
- ACRP 1D - Automotive Component Systems Analysis and Repair 8 units
- ACRP 2A - Basic Automotive Painting - Refinishing 8 units
- ACRP 2B - Automotive Refinishing Materials and Equipment 8 units
- ACRP 2C - Automotive Refinishing Applications 8 units
- ACRP 3A - Introduction to Automotive Collision Estimating 3 units
- ACRP 3B - Computerized Collision Damage Estimating 3 units
- ACRP 4A - Beginning Automotive Collision Repair I 4 units
- ACRP 4B - Beginning Automotive Collision Repair II 4 units
- ACRP 4C - Intermediate Automotive Collision Repair I 4 units
- ACRP 4D - Intermediate Automotive Collision Repair II 4 units
- ACRP 5A - Beginning Automotive Painting I 4 units
- ACRP 5B - Beginning Automotive Painting II 4 units
- ACRP 5C - Intermediate Automotive Refinishing I 4 units
- ACRP 5D - Intermediate Automotive Refinishing II 4 units
- ACRP 20 - Automotive Collision Investigation 3 units
- ACRP 22 - Automotive Repair Fraud 3 units
- ACRP 24 - Automotive Collision Analysis 3 units
- ACRP 26 - Automotive Accident Reconstruction 3 units

Total Units: 20

Recommended Electives:

- ATEC 16 - Suspension and Four Wheel Alignment 4 units
- ATEC 25 - Automotive Electrical Systems 4 units
- ATEC 81 - Automotive Air Conditioning 3 units
- MTT 16 - General Metals 3 units
- WELD 15 - Basic Welding for Allied Fields 3 units

Automotive Technology, AS

Industry and Technology Division

www.elcamino.edu/academics/indtech

The automotive technology program prepares students for employment in the field and provides upgrade opportunities for currently employed personnel. By completing the degree or certificate requirements, the student will gain proficiency in safety practices, automotive service, testing, troubleshooting, brakes, suspension, wheel alignment, engine tune-up, electrical systems, fuel systems (carburetion and fuel injection), emission systems, transmissions, drive trains, engine repair, engine rebuilding, automotive machining, or air conditioning. Competencies will be assessed regularly in accordance with Automotive Service Excellence (ASE) standards. A student completing degree or certificate requirements may expect to enter industry as a technician in automotive service, repair, tune-up, smog certification, or automotive air conditioning.

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/autotech.

Required Core: 32 units:

8 units from:

- ATEC 11 - Brakes, Suspension and Four Wheel Alignment 8 units
- ATEC 14 - Brakes 4 units
- ATEC 16 - Suspension and Four Wheel Alignment 4 units

8 units from:

- ATEC 22A - Introduction to Engine Performance, Electrical and Fuel Systems 8 units
- ATEC 23 - Engine Performance, Electrical and Fuel Systems 4 units
- ATEC 24 - Computer Controlled Engine Management, Fuel Systems and Emissions 4 units

8 units from:

- ATEC 22B - Electrical, Electronics and Computer Controlled Systems 8 units
- ATEC 25 - Automotive Electrical Systems 4 units
- ATEC 26 - Automotive Testing and Diagnosis 4 units

8 units from:

- ATEC 33 - Transmissions, Drive Train and Drive Axles 8 units
- ATEC 34 - Automatic Transmissions 4 units
- ATEC 35 - Manual Transmission, Drive Train and Drive Axles 4 units

one course from:

- ATEC 41 - Engine Rebuilding 8 units
- ATEC 42 - Engine Repair 8 units
- ATEC 43 - Introduction to Engine Repair 4 units
- ATEC 45 - Automotive Machining 4 units

Total Units: 36-40

Recommended Elective:

- WELD 15 - Basic Welding for Allied Fields 3 units

Preparation for the Automotive Technology Transfer Major

For information on specific university major requirements, please obtain a transfer curriculum guide sheet in the Counseling Services Center, consult with your counselor, or visit the Transfer Center. You may use the transfer major requirements to help you fulfill your associate degree requirements.

Biology, AS

Natural Sciences Division

www.elcamino.edu/academics/naturalsciences

The program is designed to provide students the opportunity to obtain a degree upon successful completion of the requirements of a biology transfer major. This major may include biology, botany, zoology, microbiology, molecular biology, or anatomy and physiology. The student in this program will master cell anatomy and physiology, molecular and Mendelian genetics, and the anatomy, morphology, physiology, life histories, ecology, and evolutionary aspects of archaebacteria, eubacteria, protist, fungi, and plant and animal kingdoms. Competency will be measured by exams and lab practicum exams, and in the performance of such laboratory skills as dissections, microbiological techniques, microscopy, and electrophoresis.

Preparation for the Biology Transfer Major

For information on specific university major requirements, please obtain a transfer curriculum guide sheet in the Counseling Services Center, consult with your counselor, or visit the Transfer Center. You may use the transfer major requirements to help you fulfill your associate degree requirements.

Business Management, AS

Business Division

www.elcamino.edu/academics/business

A minimum of 12 units must be completed at El Camino College.

The program provides students with the opportunity to obtain a degree or certificate in business management. The student completing this program will have the ability to organize, operate, and manage business organizations, utilize human resources, improve working relationships, draft letters and reports, and speak in various business situations. Competency will be measured by examinations, presentations, projects, and case problems.

For Gainful Employment program information for the Business program options offered at El Camino College, please visit www.elcamino.edu/academics/business/businessgmt.

Required Courses:

- BUS 1A - Financial Accounting 4 units
or
- BUS 11 - Accounting for Small Business 3 units

- BUS 20 - Business Management 3 units
- BUS 21 - Human Resources Management 3 units
- BUS 22 - Human Relations in Organizations 3 units

- BUS 25 - Introduction to Business 3 units
- BUS 28 - Written Business Communications 3 units
- BUS 29 - Oral Business Communications 3 units
- LAW 5 - Business Law 3 units
- CIS 13 - Computer Information Systems 3 units

Total Units: 27-28

Recommended Electives:

- BUS 1B - Managerial Accounting 4 units
- BUS 17 - Personal Finance 3 units
- BUS 19 - Principles of Retailing Management 3 units

Business, AS

Business Division

www.elcamino.edu/academics/business

Business Administration:

The program is designed to provide the opportunity for a transfer business major to achieve an associate degree. The student will acquire a foundation in basic accounting principles, business law, and macroeconomics and microeconomics theory. Students will be able to apply methodologies to assess fiscal and monetary policy in the marketplace and understand the basics of contract law. Competencies will be assessed through examination and projects.

Business (emphasis in Accounting):

By completing the degree or certificate requirements of the accounting program, students will acquire the ability to apply the fundamental theory, principles, and practices of the accounting cycle for unincorporated and corporate forms of business, financial, and managerial accounting theory as well as cost accounting and cost procedures used in business and industry. The student will also learn income tax regulations pertaining to individual and business income tax preparations and planning. Competencies will be assessed regularly through examinations and comprehensive problems. The major provides career opportunities in entry-level accounting positions.

Business (emphasis in Business Management):

The program provides students with the opportunity to obtain a degree or certificate in business management. The student completing this program will have the ability to organize, operate, and manage business organizations, utilize human resources, improve working relationships, draft letters and reports, and speak in various business situations. Competency will be measured by examinations, presentations, projects, and case problems.

Business (emphasis in Marketing):

The program is designed to provide students with the opportunity to obtain a degree or certificate in marketing. The student will explore opportunities in the marketing field, acquire basic marketing terminology, applying marketing concepts to the role of marketing in society and in the business firm, and balance factors that influence marketing decision-making in the global economy. Competency will be measured by examinations, projects, and case problems.

Business (emphasis in Office Administration):

The degree and certificate programs in office administration include options in office systems, management, bookkeeping, computer applications, and office clerk. Upon completion of the requirements, students will be able to operate office equipment appropriate to their specialty, apply American business office procedures, and understand information management principles, operations, and organization. Competency will be assessed regularly through examinations and projects.

Preparation for the Business Transfer Major

For information on specific university major requirements, please obtain a transfer curriculum guide sheet in the Counseling Services Center, consult with your counselor, or visit the Transfer Center. You may use the transfer major requirements to help you fulfill your associate degree requirements.

Business Administration Major

Students who intend to complete a four-year baccalaureate program in Business Administration should complete the lower division requirements of the college of their choice. See a counselor for more specific information.

For Gainful Employment program information for the Business program options offered at El Camino College, please visit the following links:

www.elcamino.edu/academics/business/accounting.

www.elcamino.edu/academics/business/businessmgmt.

www.elcamino.edu/academics/business/marketing.

www.elcamino.edu/academics/business/officeadmin.

Chemistry, AS

Natural Sciences Division

www.elcamino.edu/academics/naturalsciences

The program is designed to provide students the opportunity to obtain a degree upon successful completion of the requirements of a chemistry transfer major. The student will acquire the ability to apply fundamental theories and principles of atomic and molecular structure and to understand energy concepts and kinetics in both inorganic and organic reactions. Laboratories are designed to complement the lecture material providing the student with a foundation in quantitative and qualitative chemical techniques. Competencies will be assessed regularly by examining student abilities to predict chemical reactions, explain observed properties and behaviors, write reaction mechanisms, and perform standard laboratory procedures.

Preparation for the Chemistry Transfer Major

For information on specific university major requirements, please obtain a transfer curriculum guide sheet in the Counseling Services Center, consult with your counselor, or visit the Transfer Center. You may use the transfer major requirements to help you fulfill your associate degree requirements.

Computer Aided Design/Drafting, AS

Industry and Technology Division

www.elcamino.edu/academics/indtech

The computer aided design/drafting program prepares students for employment in career fields utilizing computer aided drafting (CAD) processes and provides upgrade opportunities for currently employed personnel. By completing the degree or certificate requirements, the student will gain proficiency in sketching, manual and CAD fundamentals, three dimensional design and modeling, and geometric dimensioning and tolerancing. Competencies will be assessed regularly by student performance using industry standard computer hardware and software. Students completing the program may expect to enter industry as CAD draftsman in mechanical, electronic, or related industrial fields.

At least 50 percent of the major requirements for the Associate in Science degree must be completed at El Camino College. For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/cadd/.

Required Core: 23.5

- CADD 5 - Introduction to Mechanical Drafting 3 units
- CADD 7 - Solid Modeling, Assemblies and Two Dimensional (2D) Drawings 3 units
- CADD 28 - Parametric Three Dimensional (3D) Modeling and Assemblies 2 units
- CADD 31 - Orientation to CATIA 2 units
- CADD 32 - Product Modeling with CATIA 2 units
- CADD 33 - Analyses and Simulations with CATIA 2 units
- CADD 37 - Advanced CATIA Functions 2 units
- CADD 43 - Design Process and Concepts 4.5 units
- CADD 45 - Geometrical Dimensioning and Tolerancing 3 units

3-4 units from:

- ECHT 11 - Introduction to Electronics 3 units
- ECHT 22 - Basic Electronic Fabrication 3 units
- MTT 16 - General Metals 3 units
- MTT 46 - Basic Machine Tool Operation 3 units
- MTT 101 - Introduction to Conventional and CNC Machining 4 units
- WELD 15 - Basic Welding for Allied Fields 3 units
- ART 141 - Digital Art Fundamentals 3 units
- ART 144 - 3D Modeling and Animation 3 units
- CIS 13 - Computer Information Systems 3 units

Total Units: 26.5 - 27.5

Computer Information Systems, AS

Business Division

www.elcamino.edu/academics/business

The program is intended for students interested in information systems and can lead to career opportunities as software specialists, web programmers, database developers, systems analysts, or network administrators. A variety of courses will enable students to learn project management, perform systems analysis and design, create business software including websites, desktop applications, mobile apps, manage business data using spreadsheets and databases, implement cybersecurity measures, handle help desk incident reports, and install and maintain small and large LANs (local area networks). Students will demonstrate their proficiency through performance in laboratory exercises and objective examinations. Program assessment is measured by program completion and periodic program review.

For Gainful Employment program information, please visit www.elcamino.edu/academics/business/cis.

Required Core: 9 units

- CIS 13 - Computer Information Systems 3 units
- CIS 119 - Introduction to Computer Security 3 units

- CIS 26 - Using Microsoft Excel 3 units
or
- CIS 28 - Database Management using Microsoft Access 3 units

17-20 units

Select one of the following options:

Help Desk:

- BUS 27 - Effective English for Business 3 units
- BUS 60A - Microcomputer Keyboarding I 1 unit
- BUS 60B - Microcomputer Keyboarding II and Document Processing 1 unit
- CIS 2 - Office Applications 3 units
- CIS 11 - Help Desk Operations 3 units
- CIS 19 - Internet, Social Networking, and the Web 3 units
- CIS 40 - Personal Computer Support and Networking 3 units

Database:

- CIS 18 - Systems Analysis and Design 3 units
- CIS 19 - Internet, Social Networking, and the Web 3 units
- CIS 28 - Database Management using Microsoft Access 3 units
- CIS 29 - Advanced Database Applications 3 units
- CIS 80 - Database Programming 4 units
- CIS 84 - MySQL Database Programming for the Web 3 units

Networking:

- CIS 40 - Personal Computer Support and Networking 3 units
- CIS 137 - Computer Networking Fundamentals 3 units
- CIS 140 - Introduction to Networks Cisco 1 3 units
- CIS 141 - Routing and Switching Essentials Cisco 2 3 units
- CIS 142 - Scaling Networks Cisco 3 3 units
- CIS 143 - Connecting Networks Cisco 4 3 units

Programming:

- CIS 16 - Application Development and Programming Using Visual Basic.Net 3 units
- CIS 18 - Systems Analysis and Design 3 units
- CIS 80 - Database Programming 4 units
- CIS 133 - Mashup JavaScript, jQuery and AJAX 4 units
- CIS 134 - ASP.NET with C# Business Web Programming 4 units

Mobile and Web Programming:

- CIS 30 - Introduction to eCommerce 3 units
- CIS 84 - MySQL Database Programming for the Web 3 units
- CIS 132 - Web Development using HTML5, CSS3, and Word Press 3 units
- CIS 133 - Mashup JavaScript, jQuery and AJAX 4 units
- CIS 134 - ASP.NET with C# Business Web Programming 4 units
- CIS 136 - Building Mobile Apps 3 units

Cybersecurity

- AJ 142 - Introduction to Digital Evidence 3 units
- CIS 119 - Introduction to Computer Security 3 units
- CIS 120 - Computer Forensics 3 units

- CIS 121 - Cybersecurity Programming 3 units
- CIS 122 - Ethical Hacking 3 units
- CIS 137 - Computer Networking Fundamentals 3 units

Total Units: 26-29

Construction Technology, AS

Industry and Technology Division

www.elcamino.edu/academics/indtech

By completing the degree or certificate requirements, students acquire proficiency in basic residential construction techniques and in analyzing, evaluating, and providing solutions for a variety of job site situations. Students will be able to interpret blueprints, estimate materials, lay out, and construct a basic residential structure in accordance with Uniform Building Code requirements. Competencies are assessed regularly by student performance in the construction technology laboratory. The program provides career opportunities in various aspects of construction, including carpentry, cabinetmaking, furniture making, a variety of subcrafts, and contracting. Completion of the degree or certificate requirements qualifies students to receive a maximum of two years credit applicable toward the California State Contractor's License Board experience requirement.

At least 50 percent of the major requirements for the Associate in Science degree must be completed at El Camino College. For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/constructiontech.

Cabinet and Fine Woodworking Option:

- CTEC 200 - General Cabinet Making 2 units
- CTEC 201 - Upper Residential Cabinets 2 units
- CTEC 202 - Base Residential Cabinets 2 units
- CTEC 203 - Dedicated Use Cabinets 2 units
- CTEC 210 - Furniture Making Laboratory - Interpreting Commercial Plans 1.5 units
- CTEC 211 - Furniture Making Laboratory - Plan Modifications 1.5 units
- CTEC 212 - Furniture Making Laboratory - Developing Original Plans 1.5 units
- CTEC 213 - Furniture Making Laboratory - Building without Plans 1.5 units
- CTEC 220 - Hinging Systems and Doors 2.5 units
- CTEC 221 - Drawer Systems 2.5 units
- CTEC 231 - Intermediate Cabinet Making Lab 1.5 units

Total Units: 20.5

Recommended Electives:

- ARCH 119 - Computer Aided Architectural Drafting 3 units
- ARCH 150A - Construction Documentation I 3 units
- BUS 17 - Personal Finance 3 units
- CADD 5 - Introduction to Mechanical Drafting 3 units
- CTEC 95 - Cooperative Work Experience Education 2-4 units
- CTEC 100 - Building Fundamentals 4 units
- CTEC 110 - Additions and Remodeling 4 units
- CTEC 222 - Convenience Hardware 2.5 units
- CTEC 230 - Cabinet Making Lab 1.5 units

Construction Technology Option:

Required Core: 18 units

- CTEC 100 - Building Fundamentals 4 units
- CTEC 110 - Additions and Remodeling 4 units
- CTEC 172 - Residential Electrical Wiring 4 units
- CTEC 180 - Residential Plumbing 4 units
- CTEC 200 - General Cabinet Making 2 units

16 units from:

- ACR 21 - Air Conditioning Fundamentals 4 units
- ARCH 179 - Design/Build Studio 4 units
- CADD 5 - Introduction to Mechanical Drafting 3 units
- CTEC 121 - Concrete and Formwork 4 units
- CTEC 122 - Rough Framing 4 units
- CTEC 131 - Roof Framing 4 units
- CTEC 132 - Stair Framing 4 units
- CTEC 141 - Interior Subcrafts 4 units
- CTEC 142 - Exterior Subcrafts 4 units
- CTEC 150 - Contract Estimating 3 units
- CTEC 160 - Business and Legal Aspects of Contracting 3 units

- CTEC 201 - Upper Residential Cabinets 2 units
- CTEC 202 - Base Residential Cabinets 2 units
- CTEC 203 - Dedicated Use Cabinets 2 units
- ET 102 - Sustainable Energy and Renewable Building Sciences and Technologies 3 units
- WELD 15 - Basic Welding for Allied Fields 3 units

Total Units: 34

Recommended Electives:

- ARCH 150A - Construction Documentation I 3 units
- ARCH 119 - Computer Aided Architectural Drafting 3 units
- BUS 17 - Personal Finance 3 units
- CTEC 95 - Cooperative Work Experience Education 2-4 units
- CTEC 230 - Cabinet Making Lab 1.5 units

Cosmetology, AS

Industry and Technology Division

www.elcamino.edu/academics/indtech

The cosmetology program offers students the option to gain proficiency in hair cutting, coloring, permanent waving, chemical relaxing, manicuring, pedicuring, and facials. After completing introduction to cosmetology, Cosmetology Level I (Certificate of Accomplishment), students will have the basic skills for entry level positions as specified by the State Board of Cosmetology. Cosmetology Level II (Certificate of Achievement) will give the student intermediate skills to work in the cosmetology industry. Completion of Cosmetology Level III (Certificate of Achievement) will give students 1600 hours and prepares them to take the California State Board of Cosmetology Examination. Competencies are assessed regularly in compliance with the California State Board of Cosmetology criteria. After successful completion of the California State Board of Cosmetology Examination, students will have a state license to embark on their new career.

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/cosmetology.

Program Costs

Students enrolling in a cosmetology class for the first time at El Camino College must purchase the Cosmetology School Kit (supplies) from the El Camino Bookstore. The cost of the kit is approximately \$1,600.

Completion of 41-42 units (1,600 hours) from the following:

13 units from:

- COSM 1 - Introduction to Cosmetology Procedures 13 units
or
- COSM 10 - Introduction to Cosmetology I 6.5 units
- COSM 11 - Introduction to Cosmetology II 6.5 units

28-29 units from:

- COSM 2A - Intermediate Cosmetology 8 units
- COSM 2B - Advanced Cosmetology 8 units
- COSM 2C - Advanced Cosmetology and Introduction to State Board Review 8 units
- COSM 2D - Advanced Preparation for State Board Review 8 units

- COSM 3 - Advanced Cosmetology Applications 5 units
or
- COSM 4 - Cosmetology Practicum 4 units

Total Units: 41-42

Electronics and Computer Hardware Technology, AS

Industry and Technology Division

www.elcamino.edu/academics/indtech

The Electronics and Computer Hardware Technology program offers various certificate and degree options for those individuals who want to either upgrade their skills or explore career opportunities. Students acquire proficiencies in foundations of electronics and computer hardware and systems applications. Emphasis is placed on the use of modern electronic test equipment, circuit simulation software, and experimentation structured in an industrial lab setting. Electronics and computer hardware technology systems provide instruction from basic system configuration to large scale computer integration and analysis. Students may pursue industrial certifications after completing as few as three courses in Electronics and Computer Hardware Technology.

At least 50 percent of the major requirements for the Associate in Science degree must be completed at El Camino College. For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/electronics.

Computer Technology Option:

Required Core: 24 units

- ECHT 11 - Introduction to Electronics 3 units
- ECHT 22 - Basic Electronic Fabrication 3 units
- ECHT 110 - Introduction to Direct and Alternating Current Circuits 3 units
- ECHT 130 - Digital Systems and Computer Logic I 3 units
- ECHT 140 - Computer Systems and Hardware Technologies I 4 units
- ECHT 142 - Computer Systems and Hardware Technologies II 4 units
- ECHT 144 - CompTIA A+ Certification Preparation for Computer Hardware Systems 4 units

two courses from:

- ECHT 95 - Cooperative Work Experience Education 2-4 units
- ECHT 191 - Introduction to Microprocessors and Interfacing 3 units
- CIS 13 - Computer Information Systems 3 units
- CIS 40 - Personal Computer Support and Networking 3 units

Total Units: 29-31

Electronics Technology Option:

Required Core: 25 units

- ECHT 11 - Introduction to Electronics 3 units
- ECHT 22 - Basic Electronic Fabrication 3 units
- ECHT 110 - Introduction to Direct and Alternating Current Circuits 3 units
- ECHT 120 - Semiconductor Circuits I 3 units
- ECHT 122 - Semiconductor Power Devices 3 units
- ECHT 124 - Operational Amplifiers and Linear Integrated Circuits 3 units
- ECHT 130 - Digital Systems and Computer Logic I 3 units
- ECHT 140 - Computer Systems and Hardware Technologies I 4 units

one course from:

- ECHT 95 - Cooperative Work Experience Education 2-4 units
- ECHT 142 - Computer Systems and Hardware Technologies II 4 units
- ECHT 144 - CompTIA A+ Certification Preparation for Computer Hardware Systems 4 units
- ECHT 191 - Introduction to Microprocessors and Interfacing 3 units

Total Units: 27-29

Engineering and Technology, AS

Industry and Technology Division

www.elcamino.edu/academics/indtech

The engineering technology program prepares students for transfer to university engineering technology programs and for employment in technical fields. By completing the degree or certificate requirements, students acquire a foundation in the principles of engineering, engineering design, digital electronics, automated manufacturing, and the application of math and science in technical fields. Careers in engineering technology involve high level technical work in the creation, production, utilization, and distribution of industrial materials, products, and processes. Competencies will be assessed regularly in accordance with skill standards established by the National Alliance for Pre-engineering Programs.

At least 50 percent of the requirements for the major must be completed at El Camino College.

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/engineeringtec.

Engineering Technician Option:

Required Core: 16 units

- ETEC 10 - Principles of Engineering Technology 3 units
or
- ETEC 10A - Principles of Engineering Technology I 1.5 units
and
- ETEC 10B - Principles of Engineering Technology II 1.5 units

- ETEC 12 - Introduction to Engineering Design 3 units
or
- ETEC 12A - Introduction to Engineering Design I 1.5 units
and
- ETEC 12B - Introduction to Engineering Design II 1.5 units

- ETEC 14 - Electronics for Engineering Technologists 3 units
or
- ETEC 14A - Electronics for Engineering Technologists I 1.5 units
and
- ETEC 14B - Electronics for Engineering Technologists II 1.5 units

- ETEC 16 - Computer Integrated Manufacturing 3 units
or
- ETEC 16A - Computer Integrated Manufacturing I 1.5 units
and
- ETEC 16B - Computer Integrated Manufacturing II 1.5 units

- MTT 101 - Introduction to Conventional and CNC Machining 4 units

5-9 units from:

- ETEC 15 - Aerospace Engineering 3 units
or
- ETEC 15A - Aerospace Engineering I 1.5 units
and
- ETEC 15B - Aerospace Engineering II 1.5 units

- ETEC 18 - Engineering Design and Development 3 units
or
- ETEC 18A - Engineering Design and Development I 1.5 units
and
- ETEC 18B - Engineering Design and Development II 1.5 units

- MTT 16 - General Metals 3 units
- CADD 28 - Parametric Three Dimensional (3D) Modeling and Assemblies 2 units
- ECHT 22 - Basic Electronic Fabrication 3 units
- MTEC 70 - Basic Robotics 2 units

- MTEC 75A - Integrated Robotic and Automated Technologies I 1.5 units
and
- MTEC 75B - Integrated Robotic and Automated Technologies II 1.5 units

- WELD 15 - Basic Welding for Allied Fields 3 units

Total Units: 21-25

Engineering Technology Option:

Required Core: 26 units

- ETEC 10 - Principles of Engineering Technology 3 units
or
- ETEC 10A - Principles of Engineering Technology I 1.5 units
and
- ETEC 10B - Principles of Engineering Technology II 1.5 units

- ETEC 12 - Introduction to Engineering Design 3 units
or
- ETEC 12A - Introduction to Engineering Design I 1.5 units
and
- ETEC 12B - Introduction to Engineering Design II 1.5 units

- ETEC 14 - Electronics for Engineering Technologists 3 units
or
- ETEC 14A - Electronics for Engineering Technologists I 1.5 units
and
- ETEC 14B - Electronics for Engineering Technologists II 1.5 units

- ETEC 16 - Computer Integrated Manufacturing 3 units
or
- ETEC 16A - Computer Integrated Manufacturing I 1.5 units
and
- ETEC 16B - Computer Integrated Manufacturing II 1.5 units

- CHEM 1A - General Chemistry I 5 units
- MATH 190 - Single Variable Calculus and Analytic Geometry I 5 units
- PHYS 2A - General Physics 4 units

3-7 units from:

- CIS 13 - Computer Information Systems 3 units
- ECHT 110 - Introduction to Direct and Alternating Current Circuits 3 units
- ENGR 1 - Introduction to Engineering 2 units
- ENGR 9 - Engineering Mechanics - Statics 3 units

- ETEC 15 - Aerospace Engineering 3 units
or
- ETEC 15A - Aerospace Engineering I 1.5 units
and
- ETEC 15B - Aerospace Engineering II 1.5 units

- ETEC 18 - Engineering Design and Development 3 units
or
- ETEC 18A - Engineering Design and Development I 1.5 units
and
- ETEC 18B - Engineering Design and Development II 1.5 units

- MTT 101 - Introduction to Conventional and CNC Machining 4 units
- MTEC 70 - Basic Robotics 2 units

- MTEC 75A - Integrated Robotic and Automated Technologies I 1.5 units
and
- MTEC 75B - Integrated Robotic and Automated Technologies II 1.5 units

Total Units: 29-33

Environmental Horticulture, AS

Natural Sciences Division

www.elcamino.edu/academics/naturalsciences

A student completing the degree or certificate requirements will be able to manage various landscape environments such as vegetable and flower gardens, turfgrass, houseplants, soils, cut flowers, and terrariums. A student will be able to apply fertilizers and pesticides (natural, chemical, biological, and cultural). The student will be able to propagate plants via grafting, budding, tissue culture, cuttings, specialized stems, and sexual means as well as demonstrate knowledge of various propagation structures. The student will be able to identify landscape plants (herbaceous, shrubs, trees) and identify their morphology. Outcomes of the program will be measured by the student's ability to design a landscape, make landscape management recommendations, and obtain employment in the industry. At least 50 percent of the requirements for the major must be completed at El Camino College.

For Gainful Employment program information, please visit www.elcamino.edu/academics/naturalsciences/Horticulture.

Required Core: 21 units

- HORT 41 - General Horticulture 3 units
- HORT 42 - Plant Propagation 3 units
- HORT 46 - Pest Control 3 units
- HORT 53 - Soils and Fertilizers 3 units
- HORT 54 - Landscape Design 3 units
- HORT 55 - Plant Identification - Trees 3 units
- HORT 56 - Plant Identification - Shrubs, Vines, and Groundcovers 3 units

one course from:

- BIOL 15 - Environmental Aspects of Biology 3 units
- BIOL 16 - Field Entomology 4 units
- HORT 44 - Ecology of Edible, Medicinal and Poisonous Plants 3 units
- HORT 60 - Basic Landscape Irrigation 3 units

Total Units: 23-25

Fashion, AS

Industry and Technology Division

www.elcamino.edu/academics/indtech

The fashion program prepares students for employment in the field of design and production or merchandising and provides upgrade opportunities for currently employed personnel. Upon completing the degree or certificate requirements, students gain proficiency in clothing, construction, fashion illustration, patternmaking, draping, computer aided fashion design, and manufacturing. Students completing the requirements for the merchandising option will also gain proficiency in presentation techniques, planning, promotion, fashion coordination, advertising, and sales. Competencies will be assessed by portfolios and exhibitions of original apparel design and garments. Students may expect to enter industry as a design assistant, costume technician, fashion consultant, stylist, entry-level pattern maker, quality control assistant, assistant merchandiser, or sales associate.

At least 50 percent of the major requirements for the Associate in Science degree must be completed at El Camino College.

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/fashion.

Fashion Design and Production Option:

Required Core: 34 units

- FASH 1 - Career Opportunities in Fashion 1 unit
- FASH 4 - Computer Fashion Illustration 3 units
- FASH 10 - Clothing Construction I 3 units
- FASH 14 - Apparel Production Techniques 1 unit
- FASH 15 - Beginning Fashion Illustration 2 units
- FASH 16 - Intermediate Contemporary and Historical Fashion Illustration 2 units
- FASH 18 - Advanced Fashion Illustration Portfolio Techniques 2 units
- FASH 20 - Textiles 3 units
- FASH 26A - Basic Design and Patternmaking 3 units
- FASH 26B - Basic Dress Design through Draping Process 3 units
- FASH 29 - Computer Pattern Design/Patternmaking 3 units
- FASH 31 - History of Costume 3 units
- FASH 41 - Fashion Analysis and Selection 3 units
- FASH 95 - Cooperative Work Experience Education 2-4 units

Total Units: 34

Recommended Electives:

- FASH 11 - Clothing Construction II 3 units
- FASH 35 - Applied Color Theory 2 units

Fashion Merchandising Option:

Required Core: 31 units

- BUS 22 - Human Relations in Organizations 3 units
- FASH 1 - Career Opportunities in Fashion 1 unit
- FASH 2 - Presentation Techniques for Fashion 1 unit
- FASH 4 - Computer Fashion Illustration 3 units
- FASH 10 - Clothing Construction I 3 units
- FASH 15 - Beginning Fashion Illustration 2 units
- FASH 20 - Textiles 3 units
- FASH 27 - Fashion Merchandising 3 units
- FASH 28 - Visual Merchandising 2 units
- FASH 35 - Applied Color Theory 2 units
- FASH 41 - Fashion Analysis and Selection 3 units
- FASH 44 - Fashion Show Production and Promotions 3 units
- FASH 95 - Cooperative Work Experience Education 2-4 units

Total Units: 31

Fire and Emergency, AS

Industry and Technology Division

www.elcamino.edu/academics/indtech

The fire and emergency technology program prepares students for entry-level employment and job upgrades in fire services and emergency medical fields. By completing the degree or certificate requirements, students will gain the ability to apply the principles of fire combat, fire protection organization, fire prevention, fire behavior, and building construction. Students will also gain proficiency in emergency medical assistance and in the handling of hazardous materials and emergency vehicles and apparatus. Competencies will be assessed regularly in compliance with the California State Firefighter I Standards and with the Los Angeles County certification process for emergency medical technicians and paramedics.

Note: Since employment as a fire fighter requires passing stringent physical and agility exams, persons considering such a career should ascertain that they meet those requirements.

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/fireacademy

Fire and Emergency Technology Option:

Required Core: 27 units

- FTEC 1 - Fire Protection Organization 3 units
- FTEC 2 - Fire Prevention Technology 3 units
- FTEC 3 - Fundamentals of Personal Fire Safety and Survival 3 units
- FTEC 5 - Fire Behavior and Combustion 3 units
- FTEC 6 - Building Construction for Fire Protection 3 units
- FTEC 10 - Hazardous Materials 3 units
- FTEC 20 - Fire Protection Equipment and Systems 3 units
- FTEC 144 - Emergency Medical Technician 6.5 units

Total Units: 27

Recommended Electives:

- FTEC 4 - Fire Company Organization and Management 3 units
- FTEC 9 - Fire Apparatus and Equipment 3 units
- FTEC 11 - Arson Detection and Control 3 units
- PE 280 - Exercise and Nutrition Programs for Fitness and Weight Management 3 units

Paramedical Technician Option:

In order to be eligible for the Paramedical Technician Option, the student must first complete the following requirements:

1. Provide verification of Emergency Medical Technician-1 (EMT-1) certification within the last 12 months;
2. Provide verification of at least 6 months experience as an EMT-1 in a pre-hospital setting;
3. Complete FTEC 15 or equivalent;
4. Pass a medical examination according to the National Fire Protection Association (NFPA) Standard #1582;
5. Furnish proof of rubella immunity, Tuberculosis (TB) test and Hepatitis B vaccine.

In addition to the program prerequisites, it is recommended that students be eligible, through assessment or coursework, for ENGL 1A and MATH 80.

Required Courses (after meeting above requirements):

Required Core: 33 units

- FTEC 130 - Basic Prehospital Care Principles 2 units
- FTEC 131 - Field Assessing and Reporting 1.5 units
- FTEC 132 - Prehospital Care Pharmacology 1.5 units
- FTEC 133 - Basic and Advanced Life Support 6.5 units
- FTEC 134 - Medical Emergencies 4 units
- FTEC 135 - Traumatic Emergencies 2 units
- FTEC 136 - Special Patient Emergencies 2 units
- FTEC 137 - Emergency Medical Services (EMS)/Legal Aspects/Documentation 2 units
- FTEC 138 - Paramedic Clinical Internship 3 units
- FTEC 139 - Paramedic Field Internship 8.5 units

Total Units: 33

Recommended Electives:

ANAT 30 and any college chemistry course with a laboratory

Preparation for the Fire and Emergency Technology Transfer Major

For information on specific university major requirements, please obtain a transfer curriculum guide sheet in the Counseling Services Center, consult with your counselor, or visit the Transfer Center. You may use the transfer major requirements to help you fulfill your associate degree requirements.

General Science, AS

Natural Sciences Division

www.elcamino.edu/academics/naturalsciences

The general science program provides students the opportunity to investigate diverse methods of inquiry by experiencing courses from a cross section of science disciplines. Students will develop critical thinking skills, learn to communicate effectively in writing, and acquire an understanding of major scientific concepts. Through course options, students will use mathematical concepts to solve problems and employ methods of scientific inquiry to understand the world around them. Completion of the degree requirements will prepare students with the skills and resources needed to facilitate academic and career decisions. Competencies will be assessed through regularly scheduled theory and laboratory examinations.

Required Core: 7-10 units

Complete one of the following two-semester sequences:

- BIOL 101 - Principles of Biology I 5 units
or
- BIOL 101H - Honors Principles of Biology I 5 units

- BIOL 102 - Principles of Biology II 5 units
or
- BIOL 102H - Honors Principles of Biology II 5 units
or
- CHEM 1A - General Chemistry I 5 units
- CHEM 1B - General Chemistry II 5 units
or
- CHEM 21A - Survey of General and Organic Chemistry 4 units
- CHEM 21B - Survey of Organic and Biochemistry 4 units
or
- PHYS 1A - Mechanics of Solids 4 units
- PHYS 1B - Fluids, Heat and Sound 3 units
or
- PHYS 1A - Mechanics of Solids 4 units
- PHYS 1C - Electricity and Magnetism 4 units
or
- PHYS 2A - General Physics 4 units
- PHYS 2B - General Physics 4 units
or
- PHYS 3A - General Physics with Calculus 5 units
- PHYS 3B - General Physics with Calculus 5 units

Complete an additional 10-13 units from:
a minimum of one Physical Science course:

- ASTR 12 - Astronomy Laboratory 1 unit
- ASTR 20 - The Solar System 3 units
or
- ASTR 20H - Honors The Solar System 3 units
- ASTR 25 - Stars and Galaxies 3 units
or
- ASTR 25H - Honors Stars and Galaxies 3 units
- CHEM 1A - General Chemistry I 5 units
- CHEM 1B - General Chemistry II 5 units
- CHEM 4 - Beginning Chemistry 5 units
- CHEM 4H - Honors Beginning Chemistry 5 units
- CHEM 21A - Survey of General and Organic Chemistry 4 units
- CHEM 21B - Survey of Organic and Biochemistry 4 units
- GEOG 1 - Physical Geography 3 units
- GEOL 1 - Physical Geology 3 units
- GEOL 2 - History of Planet Earth 3 units
- GEOL 3 - Physical Geology Laboratory 1 unit
- GEOL 4 - History of Planet Earth Laboratory 1 unit
- GEOL 15 - Natural Disasters 3 units
- OCEA 10 - Introduction to Oceanography 4 units
or
- OCEA 10H - Honors Introduction to Oceanography 4 units

a minimum of one Biological Science course:

- ANAT 32 - General Human Anatomy 4 units
- BIOL 8 - Biology of Plants 4 units
- BIOL 10 - Fundamentals of Biology 4 units
or
- BIOL 10H - Honors Fundamentals of Biology 4 units
- BIOL 11 - Fundamentals of Zoology 4 units
- BIOL 12 - Field Zoology 4 units
- BIOL 16 - Field Entomology 4 units
- BIOL 17 - Marine Biology 3 units
- BIOL 18 - Marine Biology Laboratory 1 unit
- BIOL 101 - Principles of Biology I 5 units
or
- BIOL 101H - Honors Principles of Biology I 5 units
- BIOL 102 - Principles of Biology II 5 units
or
- BIOL 102H - Honors Principles of Biology II 5 units
- MICR 33 - General Microbiology 5 units
- PHYO 31 - Human Physiology 4 units

Total Units: 20

Geography, AS

Natural Sciences Division

www.elcamino.edu/academics/naturalsciences

The program is designed to provide students the opportunity to obtain a degree upon successful completion of the requirements of a geography transfer major. The geography student will apply fundamental concepts and principles of natural and cultural systems as studied in a spatial context. Competencies will be assessed by examining the student's ability to explain the relationships between people, places, and environments. Students will also map spatial distributions of natural and cultural features.

Preparation for the Geography Transfer Major

For information on specific university major requirements, please obtain a transfer curriculum guide sheet in the Counseling Services Center, consult with your counselor, or visit the Transfer Center. You may use the transfer major requirements to help you fulfill your associate degree requirements.

Machine Tool Technology, AS

Industry and Technology Division

www.elcamino.edu/academics/indtech

The machine tool technology program prepares students for employment in machine shops, tool rooms, and instrument and experimental laboratories and provides upgrade opportunities for employed industrial personnel. Students gain proficiency in the set-up and operation of drilling machines, lathes, mills, grinders, electrical discharge machines, Computer Numerical Control (CNC) lathes, CNC milling machines, and computer aided manufacturing systems. Competencies will be assessed regularly in accordance with skill standards established by the National Institute of Metalworking Skills (NIMS). Students completing the program may enter industry as an advanced apprentice machinist or machine operator and anticipate advancement to machinist, tool and die maker, experimental machinist, or numerical control programmer.

Complete the courses in one of the following options: Machinist or Numerical Control Programmer. At least 50 percent of the courses required for the major must be completed at El Camino College.

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/mtt.

Machinist Option:

Required Core: 28 units

- MTT 2 - Manufacturing Print Reading 3 units
- MTT 10A - Introduction to CAD/CAM 3 units
- MTT 16 - General Metals 3 units
- MTT 40 - Machine Shop Calculations 3 units
- MTT 101 - Introduction to Conventional and CNC Machining 4 units
- MTT 103 - Conventional and CNC Turning 4 units
- MTT 105 - Conventional and CNC Milling 4 units
- MTT 107 - Advanced Manufacturing Processes 4 units

Total Units: 28

Numerical Control Programmer Option:

Required Core: 33 units

- MTT 2 - Manufacturing Print Reading 3 units
- MTT 10A - Introduction to CAD/CAM 3 units
- MTT 10B - Computer Numerical Control Programming 3 units
- MTT 10J - Numerical Control Graphics Programming 3 units
- MTT 10K - 3D Numerical Control Graphics Programming 3 units
- MTT 16 - General Metals 3 units
- MTT 40 - Machine Shop Calculations 3 units
- MTT 101 - Introduction to Conventional and CNC Machining 4 units
- MTT 103 - Conventional and CNC Turning 4 units
- MTT 105 - Conventional and CNC Milling 4 units

Total Units: 33

Recommended Electives:

- CADD 5 - Introduction to Mechanical Drafting 3 units
- CADD 7 - Solid Modeling, Assemblies and Two Dimensional (2D) Drawings 3 units
- CADD 31 - Orientation to CATIA 2 units
- CADD 45 - Geometrical Dimensioning and Tolerancing 3 units
- MTT 95 - Cooperative Work Experience Education 2-4 units
- MTT 99 - Independent Study 1-3 units
- WELD 15 - Basic Welding for Allied Fields 3 units

Manufacturing Technology, AS

Industry and Technology Division

www.elcamino.edu/academics/indtech

The manufacturing technology program prepares students for employment in fields related to manufacturing. By completing the degree or certificate requirements, students acquire a foundation in computer aided design, machining, electronics, technical mathematics, and welding. Students also select a career field in which to specialize or broaden their knowledge. These fields include computer aided design/drafting, electronics, environmental technology, machine tool technology, quality assurance, or welding. Competencies will be assessed regularly by student performance in the classroom and laboratory.

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/manufacturingtech.

Required Core: 19 units

- MTT 101 - Introduction to Conventional and CNC Machining 4 units
- MTT 10A - Introduction to CAD/CAM 3 units
or
- CADD 7 - Solid Modeling, Assemblies and Two Dimensional (2D) Drawings 3 units
- MTT 2 - Manufacturing Print Reading 3 units
or
- CADD 5 - Introduction to Mechanical Drafting 3 units
- MTT 40 - Machine Shop Calculations 3 units
- ECHT 11 - Introduction to Electronics 3 units
- WELD 15 - Basic Welding for Allied Fields 3 units

a minimum of 18 units from:

- CADD 28 - Parametric Three Dimensional (3D) Modeling and Assemblies 2 units
- CADD 31 - Orientation to CATIA 2 units
- CADD 32 - Product Modeling with CATIA 2 units
- CADD 33 - Analyses and Simulations with CATIA 2 units
- CADD 37 - Advanced CATIA Functions 2 units
- CADD 45 - Geometrical Dimensioning and Tolerancing 3 units
- ECHT 22 - Basic Electronic Fabrication 3 units
- ECHT 110 - Introduction to Direct and Alternating Current Circuits 3 units
- ECHT 120 - Semiconductor Circuits I 3 units
- ECHT 122 - Semiconductor Power Devices 3 units
- ECHT 124 - Operational Amplifiers and Linear Integrated Circuits 3 units
- ECHT 130 - Digital Systems and Computer Logic I 3 units
- ECHT 140 - Computer Systems and Hardware Technologies I 4 units
- ECHT 142 - Computer Systems and Hardware Technologies II 4 units
- ECHT 144 - CompTIA A+ Certification Preparation for Computer Hardware Systems 4 units
- ECHT 191 - Introduction to Microprocessors and Interfacing 3 units
- ETEC 10 - Principles of Engineering Technology 3 units
or
- ETEC 10A - Principles of Engineering Technology I 1.5 units
and
- ETEC 10B - Principles of Engineering Technology II 1.5 units
- ETEC 12 - Introduction to Engineering Design 3 units
or
- ETEC 12A - Introduction to Engineering Design I 1.5 units
and
- ETEC 12B - Introduction to Engineering Design II 1.5 units
- ETEC 14 - Electronics for Engineering Technologists 3 units
or
- ETEC 14A - Electronics for Engineering Technologists I 1.5 units
and
- ETEC 14B - Electronics for Engineering Technologists II 1.5 units
- ETEC 16 - Computer Integrated Manufacturing 3 units
or
- ETEC 16A - Computer Integrated Manufacturing I 1.5 units
and

- ETEC 16B - Computer Integrated Manufacturing II 1.5 units
- ETEC 18 - Engineering Design and Development 3 units
or
- ETEC 18A - Engineering Design and Development I 1.5 units
and
- ETEC 18B - Engineering Design and Development II 1.5 units
- MTT 10B - Computer Numerical Control Programming 3 units
- MTT 10J - Numerical Control Graphics Programming 3 units
- MTT 10K - 3D Numerical Control Graphics Programming 3 units
- MTT 103 - Conventional and CNC Turning 4 units
- MTT 105 - Conventional and CNC Milling 4 units
- MTT 107 - Advanced Manufacturing Processes 4 units
- MTEC 70 - Basic Robotics 2 units
- MTEC 75 - Integrated Robotic and Automated Technologies 3 units
or
- MTEC 75A - Integrated Robotic and Automated Technologies I 1.5 units
and
- MTEC 75B - Integrated Robotic and Automated Technologies II 1.5 units
- WELD 1 - Introduction to Welding Process 8 units
- WELD 5 - Basic Welding Technology 8 units
- WELD 23 - Advanced Arc Welding Specialty Lab 2 units
- WELD 40A - Introduction to Gas Tungsten Arc Welding (GTAW) 3 units
- WELD 45 - Structural Fabrication 5 units

a maximum of 4 units from:

- CADD 95 - Cooperative Work Experience Education 2-4 units
- ECHT 95 - Cooperative Work Experience Education 2-4 units
- MTT 95 - Cooperative Work Experience Education 2-4 units
- WELD 95 - Cooperative Work Experience Education 2-4 units

Total Units: 37

Marketing, AS

Business Division

www.elcamino.edu/academics/business

A minimum of 12 units must be completed at El Camino College.

The program is designed to provide students with the opportunity to obtain a degree or certificate in marketing. The student will explore opportunities in the marketing field, acquire basic marketing terminology, applying marketing concepts to the role of marketing in society and in the business firm, and balance factors that influence marketing decision-making in the global economy. Competency will be measured by examinations, projects, and case problems.

For Gainful Employment program information for the Business program options offered at El Camino College, please visit www.elcamino.edu/academics/business/marketing.

Required Core:

- BUS 12 - Advertising 3 units
- BUS 14 - Marketing 3 units
- BUS 22 - Human Relations in Organizations 3 units
- BUS 25 - Introduction to Business 3 units
- BUS 28 - Written Business Communications 3 units
- CIS 13 - Computer Information Systems 3 units
- LAW 5 - Business Law 3 units

6-7 units from:

- BUS 1A - Financial Accounting 4 units
or
- BUS 11 - Accounting for Small Business 3 units
- BUS 19 - Principles of Retailing Management 3 units
or
- BUS 24 - Small Business Entrepreneurship 3 units

Total Units: 27-28

Mathematics, AS

Mathematical Sciences Division

www.elcamino.edu/academics/mathsciences

The degree provides the student with sufficient depth to support a lifelong interest in mathematics, and is suitable for the student who plans to transfer in mathematics. The core of the major is the calculus sequence, in which the student will acquire a conceptual understanding of the principles of differential and integral calculus for functions of one and several variables, as well as the ability to apply calculus techniques in a variety of applications. One course in Differential Equations with Linear Algebra is required, as well as one additional course to provide the student with greater breadth in mathematics. Competency will be assessed by evaluating the student's ability to solve a wide range of calculus and other mathematical problems.

At least 8 units for this degree must be completed at El Camino College.

Required Core: 20 units

- MATH 190 - Single Variable Calculus and Analytic Geometry I 5 units
- MATH 191 - Single Variable Calculus and Analytic Geometry II 5 units
- MATH 220 - Multi-Variable Calculus 5 units
- MATH 270 - Differential Equations with Linear Algebra 5 units

4-5 units from:

- CSCI 1 - Problem Solving and Program Design Using C++ 4 units
- CSCI 2 - Introduction to Data Structures 5 units
- CSCI 3 - Computer Programming in Java 4 units
- MATH 150 - Elementary Statistics with Probability 4 units
- MATH 150H - Honors Elementary Statistics with Probability 4 units
- MATH 210 - Introduction to Discrete Structures 5 units
- PHYS 1A - Mechanics of Solids 4 units
- PHYS 3A - General Physics with Calculus 5 units

Total Units: 24-25

Preparation for the Mathematics Transfer Major

For information on specific university major requirements, please obtain a transfer curriculum guide sheet in the Counseling Services Center, consult with your counselor, or visit the Transfer Center. You may use the transfer major requirements to help you fulfill your associate degree requirements.

Nursing, AS

Health Sciences and Athletics Division

www.elcamino.edu/academics/healthsciences

The degree provides the student with the skills to utilize the nursing process and assess unique patient needs across the lifespan using a concept-based approach to learning. Degree competence will be assessed regularly by evaluation of expected learning outcomes in the clinical setting as well as course examinations. Emphasis is placed on the use of critical thinking and creative problem-solving in the clinical setting. The nursing major prepares graduates in a variety of health care settings as entry-level registered nurses. Upon successful completion of the nursing program, the graduate is eligible to take the NCLEX-RN® (National Council Licensure Examination for Registered Nurses). Program assessment is conducted by monitoring student success rates on the NCLEX-RN® exam.

Nursing Philosophy: The Associate Degree Nursing Program supports the mission of El Camino College. The program offers quality, comprehensive educational opportunities and services to its diverse community, specifically those individuals aspiring to obtain the knowledge, skills, and attitudes required of a Registered Nurse.

Program Length and Licensing Requirements:

The program is two academic years in length after completion of program prerequisites. Acceptance of qualified applicants to the program does not guarantee graduation from the program/college. Students must achieve a statistically determined passing score on the comprehensive predictor examination upon completion of the program prior to taking the NCLEX-RN®. Graduates must pass the NCLEX-RN® in order to become licensed and practice registered nursing in the state of California.

Credit for Military Service: The Nursing Program will comply with the requirements of California Senate Bill 466. Procedures for the military challenge for advanced placement into the Nursing Program is published on the Nursing Program website. Students may review Administrative Procedure 4236 Credit for Military Service on the El Camino College website www.elcamino.edu/administration/board/policies.asp.

Nursing Degree Options:

Generic - Students who are not licensed as vocational nurses/psychiatric technicians and are not transferring from another accredited nursing program are considered generic students.

Advanced Standing/Upward Mobility - Prospective students who have had prior education in nursing or other health-related areas may request consideration for entry into the nursing program with advanced placement. Applicants would include Licensed Vocational/Practical Nurses, Licensed Psychiatric Technicians, and transfer students from accredited nursing programs. Advanced standing applicants are admitted to the program on a space available basis. Upon request, transfer students' transcripts will be individually evaluated for granting credit. Transfer students may be offered advanced standing. Licensed vocational nurses may enter the upward mobility option or 30-unit option (see below).

Program Prerequisites for the Associate Degree Nursing Program (All Students)

Science Courses:

Complete the following courses with a minimum 2.5 GPA. All science courses must have been completed within seven years prior to the date of nursing program application.

1. ANAT 32 and PHYO 31; or APHY 34A and APHY 34B
2. MICR 33
3. MEDT 1
4. PSYC 16

Nonscience Courses:

1. ENGL 1A (not included in the required basic science 2.5 minimum GPA)
2. MATH 73 or pass the Mathematics Competency Exam

Additional Prerequisites:

1. Cumulative GPA of 2.5 in all college courses.
2. Complete the Readiness Assessment Test - ATI Test of Essential Academic Skills (ATI TEAS) with the state recommended passing score. If a prospective student receives a score below the state recommended score, the student will be required to complete remediation and then retake the ATI TEAS. Students will only have two opportunities to take and successfully pass the TEAS exam. Students who take the TEAS at ECC and complete the required remediation are required to retest at ECC.
3. NURS 144 and NURS 143 and NURS 146

All general education courses and nursing courses must be completed with a minimum grade of C. Please contact a nursing counselor to determine course equivalencies.

Additional Prerequisites for Upward Mobility Students (LVN Option):

1. Possession of a current California Vocational Nurse/ Practical Nurse license and employment as a LVN/LPN in a sub-acute or acute care setting within the last 3 years.
2. Complete the Readiness Assessment Test - ATI Test of Essential Academic Skills (ATI TEAS) with the state recommended passing score. If a prospective student receives a score below the state recommended score, the student will be required to complete remediation and then retake the ATI TEAS. Students will only have two opportunities to take and successfully pass the TEAS exam. Students who take the TEAS at ECC and complete the required remediation are required to retest at ECC.
3. Documentation demonstrating completion of a LVN program.
4. NURS 144 and NURS 146

Application Filing Period: The El Camino College Nursing Program accepts applications twice a year beginning the third week of the fall and spring semester. Each application period will last for three weeks.

The state of California requires all Registered Nurses (RNs) to have a valid Social Security or Tax Identification Number. Students seeking admission into the nursing program must provide proof of a valid social security or tax identification number to the nursing counselor prior to receiving a verification of eligibility documentation for admission consideration into the nursing program.

Application Review

Generic Students - All complete applications will be reviewed and ranked according to Criteria 1-3 of the Multicriteria Enrollment Criteria. Students at the top of the ranking who have not taken the Assessment Technology Inc. (ATI) TEAS will be invited to take the test. Following completion of the ATI TEAS, student points will be recalculated including all five criteria. Selected students will then be notified via ECC email that they have been conditionally accepted into the nursing program. Upon receipt of an offer, applicants should accept or decline the offer and complete any further conditions of enrollment as stated in the email. Acceptance or refusal of the offer must be received in writing in the nursing office by the date specified in the email. Failure to reply by the specified date will result in the removal of the applicant's name from the applicant pool. Upon receipt of the applicant's signed acceptance letter and attendance at a mandatory orientation, the offeree confers from conditional place to a confirmed place. Any applicant who accepts a place and attends an orientation but does not attend the first day of class will be dropped from the program and will not be eligible to reapply. Students who are not admitted to the program may reapply during the next application period. For more information, visit our website at www.elcamino.edu/nursing.

Upward Mobility - All complete applications will be reviewed and ranked according to the cumulative GPA. Students at the top of the ranking who have not taken the ATI TEAS will be invited to take the test. Following completion of the ATI TEAS, student will be re-ranked according to the score achieved. Student selected will be notified via their ECC email address that they have been conditionally accepted into the nursing program. Upon receipt of a conditional offer, applicants should print out the attached documents and choose one of the following options: 1) accept the offer or decline the offer. Acceptance or refusal of the conditional offer must be received in writing in the nursing office by the date specified in the email. Failure to reply by specified date will result in the removal of the applicant's name from the application pool. Upon receipt of the applicant's signed acceptance letter and attendance at a mandatory orientation, the offer converts from a conditional place to a confirmed place. Any applicant who accepts placement and attends the orientation but does not attend the first day of class will be dropped from the program and will not be eligible to reapply.

Transfer Students - Credit for nursing courses completed at another college will be evaluated on an individual basis by the Director of Nursing or the Director's designee. Credit can be achieved through the petition process as well. Students interested in applying for admission consideration to the El Camino College associate degree nursing program as a transfer student will not be accepted beyond the second semester.

Waitlist: There will be no waitlist. Students who are not admitted to the program may reapply during the next application period. Students who are not offered admission are encouraged to meet with a nursing counselor.

Program Costs

Nursing Program: In addition to registration fees, the costs for books, shoes, physical exam, CPR certification, name badges, patches, uniforms, stethoscope, and additional skills lab supplies are approximately \$1,000 for the first year.

Major Requirements Generic Program

All general education courses and nursing courses must be completed with a minimum grade of C before the student may enroll in the next course. Please contact a nursing counselor to determine course equivalencies.

Required Core:

- NURS 220 - Nursing Fundamentals 3.5 units
- NURS 222 - Medical Surgical Nursing - Older Adult 3.5 units
- NURS 224 - Nursing Pharmacology 3 units
- NURS 226 - Nursing Skills Practicum I .5 unit
- NURS 230 - Mental Health Nursing 3.5 units
- NURS 232 - Obstetrical Patients and the Newborn 2.5 units
- NURS 234 - Pediatric Nursing 2.5 units
- NURS 238 - Nursing Skills Practicum II .5 unit
- NURS 240 - Intermediate Medical-Surgical Nursing I 4 units
- NURS 242 - Intermediate Medical-Surgical Nursing II 4 units
- NURS 244 - Nursing Skills Practicum III .5 units
- NURS 247 - Advanced Medical-Surgical Nursing I 6 units
- NURS 248 - Advanced Medical-Surgical Nursing II Preceptorship 2 units

- ENGL 1B - Literature and Composition 3 units *
- or
- ENGL 1BH - Honors Literature and Composition 3 units *

- PSYC 5 - General Psychology 3 units
- or
- PSYC 5H - Honors General Psychology 3 units

- SOCI 101 - Introduction to Sociology 3 units

Total Units: 45

*Note: any 3 unit course from ENGL 1C, ENGL 1CH; or COMS 100, COMS 120, COMS 130, COMS 140; or a Humanities course may be substituted for ENGL 1B or ENGL 1BH.

Nursing: Upward Mobility (LVN to RN Option)

All general education courses and nursing courses must be completed with a minimum grade of C. Please contact a nursing counselor to determine course equivalencies.

Required Core:

- NURS 149 - Advanced Placement in Nursing 2.5 units
- NURS 230 - Mental Health Nursing 3.5 units
- NURS 232 - Obstetrical Patients and the Newborn 2.5 units
- NURS 234 - Pediatric Nursing 2.5 units
- NURS 238 - Nursing Skills Practicum II .5 unit
- NURS 242 - Intermediate Medical-Surgical Nursing II 4 units
- NURS 244 - Nursing Skills Practicum III .5 units
- NURS 247 - Advanced Medical-Surgical Nursing I 6 units
- NURS 248 - Advanced Medical-Surgical Nursing II Preceptorship 2 units

- ENGL 1B - Literature and Composition 3 units *
- ENGL 1BH - Honors Literature and Composition 3 units *

- PSYC 5 - General Psychology 3 units
or
- PSYC 5H - Honors General Psychology 3 units

- SOCI 101 - Introduction to Sociology 3 units

Total Units: 33

*Note: any 3 unit course from ENGL 1C, ENGL 1CH; or COMS 100, COMS 120, COMS 130, COMS 140; or a Humanities course may be substituted for ENGL 1B or ENGL 1BH.

30 Unit Non-Degree Track

The Licensed Vocational Nurse may establish eligibility to take the state licensing examination to become a Registered Nurse in California only by completing a sequence of courses. The Associate Degree is not awarded upon completion of this program and the nurse will always be considered a non-graduate. Applicants are admitted as space is available. For more information, please contact the nursing department.

General Program Information

Board of Registered Nursing (BRN) Requirements: The BRN has approved a set curriculum at ECC which includes, in addition to nursing courses, sociology, psychology and a course in communication and analytical thinking. Please see document entitled: Sample Curriculum for Associate Degree Nursing Program. These additional courses are not required for entry into the nursing program but must be completed prior to graduation. Students are strongly encouraged to complete these classes prior to entry into the nursing program.

El Camino College Associate in Science Degree:

In addition to the nursing department and Board of Registered Nursing course requirements, students must meet the El Camino College A.S. degree general education requirements outlined in the college catalog. Please consult with a nursing counselor if you have questions. The Associate Degree Nursing Program is a demanding, rigorous program that requires advanced academic preparation, personal commitment, and a considerable amount of time in study and preparation outside of class. Mandatory general information sessions are available each semester to assist prospective applicants so they may learn more about careers in nursing, the El Camino College nursing program and its requirements, and how to formulate an educational plan to become a qualified applicant. Nursing courses must be taken in sequence. Clinical facilities require background checks which require a valid social security number.

Required Program GPA: Nursing students must maintain a minimum overall GPA of 2.0 to continue in the nursing program, graduate and receive an Associate in Science degree.

After a student is admitted into the nursing program, a full-time load is considered 10 units per semester. Students are expected to complete their nursing courses at El Camino College. Credit may be granted for course work completed at an accredited nursing program.

Program Readmission and Course Repetition:

Students who leave the nursing program are eligible to be readmitted to the program subject to space availability. Students will only be eligible to repeat one single nursing course, in which a D or F grade was achieved. Policies related to progression and re-entry to the nursing program are available for review in the Nursing Office and are published in the Nursing Student Handbook. Student academic standing at the time of leaving the program will determine whether academic support courses will be prescribed for completion before re-entry to the nursing program. Students not eligible to re-enter the program may individually appeal their re-entry status through the Acceptance, Transfer and Progression Committee.

Re-Entry Policy:

Students must apply for re-admission into the nursing program within one (1) year of the exit date. The student who is absent from the program in excess of one year will be considered "inactive" and placed on "inactive status" in the nursing program. To return to an "active status" the student must successfully complete competency review of content/skills from the last successfully completed course. The competency review will be given in the skills lab. If the student fails the skills competency review he or she may elect to repeat the last course passed (if applicable). A clinical evaluation for students returning or transferring into a medical surgical course may also be required and will be administered by a faculty member assigned to the supervised practice lab.

Students who have exited from the nursing program for more than 2 years will be required to repeat a previous course in which a "C" or better grade was earned. The Director of Nursing or the Director's designee will be responsible for determining whether the student will be required to repeat a nursing course. A clinical evaluation for students returning or transferring into a medical surgical course may also be required and will be administered by a faculty member assigned to the supervised practice lab. Re-entry to the nursing program is on a space-available basis.

California State Licensure:

Special Note Regarding Licensure: All graduates of the Nursing Program are eligible to take the National Licensing Examination (NCLEX-RNR) and must pass the exam to practice in California. The NCLEX-RNR is developed by the National Council of State Boards of Nursing and is administered by computer nationally throughout the year. The California Board of Registered Nursing (BRN) requires that all students applying for the NCLEX be fingerprinted and submit a fingerprint card with the licensing examination application. The BRN protects the public by screening applicants for licensure in order to identify potentially unsafe practitioners. The BRN may deny applications for permanent licensure, interim permits and temporary licenses if the applicant has been found guilty of dishonesty; fraud or deceit; felony; child abuse; sex offender crimes; acts involving narcotics, dangerous drugs or devices; assault and/or battery; and other crimes. Applicants who have questions regarding limitations related to licensure should contact the California Board of Registered Nursing (916) 322-3350 or access its website at www.rn.ca.gov. It is the responsibility of the applicant to present sufficient evidence of rehabilitation. Applicants are advised to explore other career opportunities prior to investing substantial time in a nursing program if it appears that a prior serious act or conviction may jeopardize licensure.

Bachelor of Science in Nursing: Students intending to pursue a Bachelor of Science degree in Nursing should consult a nursing counselor.

Office Administration, AS

18 units of the major requirements must be completed at El Camino College.

The degree and certificate programs in office administration include options in office systems, management, bookkeeping, computer applications, and office clerk. Upon completion of the requirements, students will be able to operate office equipment appropriate to their specialty, apply American business office procedures, and understand information management principles, operations, and organization. Competency will be assessed regularly through examinations and projects.

For Gainful Employment program information for the Business program options offered at El Camino College, please visit www.elcamino.edu/academics/business/officeadmin.

Office Systems Option:

Required Courses:

- BUS 27 - Effective English for Business 3 units
- BUS 28 - Written Business Communications 3 units
- BUS 29 - Oral Business Communications 3 units
- BUS 43 - Business Office Administration 3 units
- BUS 60A - Microcomputer Keyboarding I 1 unit
- BUS 60B - Microcomputer Keyboarding II and Document Processing 1 unit
- CIS 2 - Office Applications 3 units
- CIS 13 - Computer Information Systems 3 units
- CIS 26 - Using Microsoft Excel 3 units
- CIS 28 - Database Management using Microsoft Access 3 units

Total Units: 26

Management Option:

Required Courses:

- BUS 1A - Financial Accounting 4 units
- or
- BUS 11 - Accounting for Small Business 3 units

- BUS 20 - Business Management 3 units
- BUS 22 - Human Relations in Organizations 3 units
- BUS 25 - Introduction to Business 3 units
- BUS 27 - Effective English for Business 3 units
- BUS 28 - Written Business Communications 3 units
- BUS 29 - Oral Business Communications 3 units
- BUS 43 - Business Office Administration 3 units

- CIS 2 - Office Applications 3 units
- CIS 13 - Computer Information Systems 3 units

Total Units: 30-31

Photography, AS

Fine Arts Division

www.elcamino.edu/academics/finearts

The photography program provides students with a comprehensive foundation in skills, techniques, and processes for commercial and creative photography. Each student acquires practical and creative skills relating to camera operation, films, color theory, photo composition, lighting, processing, printing, and business operations through a wide range of studio courses. Proficiencies are demonstrated through class and laboratory projects, critiques, essays, and objective tests. Program assessment is measured by portfolios, juried and public exhibitions, program completion, and periodic program review. Students qualify to pursue a variety of careers in the field of professional photography.

A minimum of 12 units must be completed at El Camino College.

For Gainful Employment program information, please visit www.elcamino.edu/academics/finearts/photo.

Required Core: 20-21 units

- PHOT 101 - Elementary Photography 2 units
- or
- PHOT 106 - Basic Photojournalism 3 units
- or
- JOUR 6 - Basic Photojournalism 3 units

- PHOT 150 - The Art of Photography 3 units
- or
- ART 150 - The Art of Photography 3 units

- PHOT 102 - Basic Photography 3 units
- PHOT 202 - Intermediate Photography 4 units
- PHOT 203 - Advanced Photography 4 units
- PHOT 223A - Theory of Color/Color Printing 4 units

3 units from:

- PHOT 204 - Portraiture 3 units

- PHOT 206ab - Advanced Photojournalism 2 units *
- or
- JOUR 7ab - Advanced Photojournalism 2 units *

- PHOT 223B - Intermediate Color Photography/Printing 4 units
- PHOT 254 - Intermediate 35mm Black and White Photography 2 units
- PHOT 257 - Creative Photographic Processes 2 units
- ART 141 - Digital Art Fundamentals 3 units
- FILM 122 - Production I 3 units
- FILM 234 - Camera and Lighting 3 units

3 units from:

- ART 130 - Two-Dimensional Design I 3 units
- ART 142 - Digital Imaging Fundamentals 3 units
- BUS 11 - Accounting for Small Business 3 units
- BUS 12 - Advertising 3 units
- PHYS 11 - Descriptive Introduction to Physics 3 units

Total Units: 26-27

Note: PHOT 106 is the same course as JOUR 6. Course credit is limited to PHOT 106 or JOUR 6.

Note: PHOT 150 is the same course as ART 150. Course credit is limited to PHOT 150 or ART 150.

*Note: one semester of PHOT 206ab or JOUR 7ab may be counted for the major.

Recommended Electives:

- ART 101 - Art and Visual Culture: A Global Perspective 3 units
- ART 110 - Drawing Fundamentals I 3 units
- ART 143 - Digital Publishing Fundamentals 3 units
- BUS 20 - Business Management 3 units
- BUS 24 - Small Business Entrepreneurship 3 units

Physical Science, AS

Natural Sciences Division

www.elcamino.edu/academics/naturalsciences

The physical science program provides students the opportunity to investigate diverse methods of inquiry by experiencing courses from a cross section of science disciplines. Students will develop critical thinking skills, learn to communicate effectively in writing, and acquire an understanding of major scientific concepts. Through course options, students will use mathematical concepts to solve problems and employ methods of scientific inquiry to understand the world around them. Completion of the degree requirements will prepare students with the skills and resources needed to facilitate academic and career decisions. Competencies will be assessed through regularly scheduled theory and laboratory examinations.

Required Core: 7-10 units

Complete one of the following two-semester sequences:

- CHEM 1A - General Chemistry I 5 units
- CHEM 1B - General Chemistry II 5 units
- or
- PHYS 1A - Mechanics of Solids 4 units
- PHYS 1B - Fluids, Heat and Sound 3 units
- or
- PHYS 1A - Mechanics of Solids 4 units
- PHYS 1C - Electricity and Magnetism 4 units
- or
- PHYS 2A - General Physics 4 units
- PHYS 2B - General Physics 4 units
- or
- PHYS 3A - General Physics with Calculus 5 units
- PHYS 3B - General Physics with Calculus 5 units

10-13 units from:

- ASTR 12 - Astronomy Laboratory 1 unit
- ASTR 20 - The Solar System 3 units
- or
- ASTR 20H - Honors The Solar System 3 units
- ASTR 25 - Stars and Galaxies 3 units
- or
- ASTR 25H - Honors Stars and Galaxies 3 units
- CHEM 4 - Beginning Chemistry 5 units
- or
- CHEM 4H - Honors Beginning Chemistry 5 units
- CHEM 7A - Organic Chemistry I 5 units
- CHEM 7B - Organic Chemistry II 5 units
- CSCI 1 - Problem Solving and Program Design Using C++ 4 units
- GEOG 1 - Physical Geography 3 units
- GEOL 1 - Physical Geology 3 units
- GEOL 2 - History of Planet Earth 3 units
- GEOL 3 - Physical Geology Laboratory 1 unit
- GEOL 4 - History of Planet Earth Laboratory 1 unit
- GEOL 15 - Natural Disasters 3 units
- MATH 150 - Elementary Statistics with Probability 4 units
- or
- MATH 150H - Honors Elementary Statistics with Probability 4 units
- MATH 180 - Pre-Calculus 5 units
- MATH 190 - Single Variable Calculus and Analytic Geometry I 5 units
- MATH 191 - Single Variable Calculus and Analytic Geometry II 5 units
- MATH 220 - Multi-Variable Calculus 5 units
- MATH 270 - Differential Equations with Linear Algebra 5 units

- OCEA 10 - Introduction to Oceanography 4 units
- or
- OCEA 10H - Honors Introduction to Oceanography 4 units

- PHYS 1C - Electricity and Magnetism 4 units
- PHYS 1D - Optics and Modern Physics 4 units

Total Units: 20

Physics, AS

Natural Sciences Division

www.elcamino.edu/academics/naturalsciences

The program is designed to provide students the opportunity to obtain a degree upon successful completion of the requirements of a physics transfer major. Upon completion of the program requirements, the student will acquire the ability to use and develop problem solving strategies that apply to physical concepts involving mechanics, thermodynamics, sound, light, electricity and magnetism, and modern physics. Laboratory activities will provide the student with a foundation in measurement and analysis techniques necessary to test, understand, and apply physical concepts. Competency will be assessed by evaluating the student's ability to quantitatively and qualitatively determine the results of physical situations.

Preparation for the Physics Transfer Major

For information on specific university major requirements, please obtain a transfer curriculum guide sheet in the Counseling Services Center, consult with your counselor, or visit the Transfer Center. You may use the transfer major requirements to help you fulfill your associate degree requirements.

Pre-Engineering, AS

Mathematical Sciences Division

www.elcamino.edu/academics/mathsciences

The degree is designed for students planning to transfer into an engineering program. The student will acquire the ability to apply principles of mathematics, physics, and chemistry. Competencies will be regularly assessed through problem solving involving differential and integral calculus of one and several variables; differential equations and linear algebra; mechanics of solids, fluids, heat, sound, electricity and magnetism; chemical reactions and chemical equations.

Preparation for the Pre-Engineering Transfer Major

For information on specific university major requirements, please obtain a transfer curriculum guide sheet in the Counseling Services Center, consult with your counselor, or visit the Transfer Center. You may use the transfer major requirements to help you fulfill your associate degree requirements.

Pre-Nursing, AS

Health Sciences and Athletics Division

www.elcamino.edu/academics/healthsciences

This degree is designed for students planning to transfer to a generic nursing program at a university. Upon successful completion of the requirements for the pre-nursing transfer major, students will acquire a foundation in the biological, physical, and social sciences as well as communication skills. This eclectic theory base will provide foundation skills that transfer students will need for practice and advanced education in a baccalaureate program in nursing. Competencies will be assessed through regularly scheduled course examinations.

Preparation for the Pre-Nursing Transfer Major

For information on specific university major requirements, please obtain a transfer curriculum guide sheet in the Counseling Services Center, consult with your counselor, or visit the Transfer Center. You may use the transfer major requirements to help you fulfill your associate degree requirements.

Radiologic Technology, AS

Health Sciences and Athletics Division

www.elcamino.edu/academics/healthsciences

The radiologic technology (medical x-ray) program is a competency-based health science specialty. The program provides a specialized educational experience, which assesses progress through clinical application evaluations and academic course work. Successful completion of the program (degree and certificate) prepares students for employment as skilled medical imaging practitioners and makes them eligible for state and national certification examinations. Program assessment is conducted by monitoring student success rates on the State and National Certification Examinations.

General Information

Radiologic Technology courses must be completed with a minimum grade of C before the student may enroll in the next course. For the most up-to-date information about the Radiologic Technology program, please visit the Radiologic Technology website at www.elcamino.edu/academics/healthsciences/radiologictech.

Program Length and Licensing Requirements

The Associate Degree Radiologic Technologist Program is a minimum of twenty-five months in length, after the completion of the program prerequisite classes. The twenty-five months include the academic semesters and clinical internship (taken concurrently). Satisfactory completion of the prescribed course of study qualifies graduates to take both State and National Certification Examinations. The Radiologic Technology Program is accredited by the California State Department of Public Health Services - Radiologic Health Branch (CDPHSRHB), and the Joint Review Committee on Education in Radiologic Technology (JRCERT).

Program Prerequisites

Complete the following courses with a grade point average of 2.25 or better: ANAT 32 or Anatomy and Physiology 34A, CIS 13, ENGL 1A, MATH 73 or MATH 80, PHYO 31 or Anatomy and Physiology 34B, PSYC 5, RTEC A.

Acceptance into Radiologic Technology Program

New students are admitted to the program once per year, in the fall semester. Acceptance at El Camino College does not guarantee entrance into the Radiologic Technology Program. Prior to filing an application, transcripts of all academic work completed must be filed in the Office of Admissions and Records.

The application filing period is once a year, during the spring semester. Student applying to the program will be required to take an entrance exam along with filing an application during the spring semester. The cost of the exam is the responsibility of the student. Additional information about the application process and the application packet is available for download on the Radiologic Technology website.

Prior to Starting the Program

Students will be required to attend two mandatory orientation sessions during the summer, before beginning the program in the fall semester. Provisionally accepted students will be required to undergo a complete physical examination, including a TB test. Students must submit a current CPR for BLS provider card, a criminal background check and drug screening clearance as required by the Joint Commission on Accreditation of Health Care Organizations (JCAHO) prior to a guaranteed acceptance to the program, and placement at a clinical education training facility. The student is responsible for the cost of these requirements.

Program Costs

Cost of books, uniforms and miscellaneous supplies must be borne by the student and is estimated at approximately \$1,500 for the first year, and approximately \$500 the second year of the program.

Licensure

Students who complete all Radiologic Technology Associate in Science degree and Certificate of Accomplishment requirements are eligible to take the licensing examination administered by the American Registry of Radiologic Technologists (ARRT) to become a registered Radiologic Technologist (R.T.). Upon completion of the ARRT exam, students are eligible to apply for the State of California, Department of Health Public Services, Radiation Health Branch, Certified Radiologic Technologist (C.R.T.) licensure and the Fluoroscopy examination and licensure (C.R.T.), (R.F.).

Program Readmission and Course Repetition

Students who leave the Radiologic Technology program for any reason (self or faculty initiated) are eligible to be readmitted to the program subject to availability of space. Radiologic Technology courses in which a student has received a D or F grade may be repeated one time and the student may only re-enter the program one time. The JRCERT requires that all students complete the program within three years of their original admission date. This policy is available for review in the Program Director's Office and is published in the Student Handbook. Student academic standing at the time of leaving the program will determine whether academic support courses will be prescribed before re-entry. Students must comply with all conditions of acceptance for re-entry, including submission of a self-evaluation and filing a new application before the student may return. The application points will also be considered when ranking the returning students. The student may be asked to repeat courses previously passed within the program for successful continuance in the program.

Advanced Standing

The student with prior training or experience may petition for credit by examination for RTEC 111 and RTEC 123. Prospective students who have had prior education in an accredited Radiologic Technology program may request consideration for entry into the Radiologic Technology Program with advanced placement if space permits. Foreign graduates must have their transcripts evaluated and meet with a college counselor for matriculation prior to meeting with the Program Director regarding the application process.

Special Note Regarding American Registry of Radiologic Technologists (ARRT) Certification

Students must comply with the "Rules of Ethics" contained in the American Registry of Radiologic Technologists (ARRT) Standards of Ethics. The "Rules of Ethics" are minimally acceptable standards of professional conduct for all Registered Technologists and Applicants. The "Rules of Ethics" are intended to promote protection, safety and comfort of patients. Registered Technologists and Applicants engaging in any of the conduct or activities noted in the "Rules of Ethics" or in the conviction of a crime, including a felony, gross misdemeanor or a misdemeanor with sole exception of speeding and parking violations, all alcohol and drug related violations are subject to sanctions and must be reported. Applicants who have questions regarding limitations related to licensure should contact the ARRT directly.

Required Courses:

- RTEC 91 - Radiographic Pathology 2 units
- RTEC 93 - Venipuncture and Pharmacology for the Radiologic Technologist 1 unit
- RTEC 104 - Clinical Education 1 1.5 units
- RTEC 106 - Clinical Experience 1 4 units
- RTEC 107 - Clinical Experience 2 7 units
- RTEC 109 - Clinical Experience 3 2.5 units
- RTEC 111 - Fundamentals of Radiologic Technology 4 units
- RTEC 123 - Radiographic Positioning 1A 4 units
- RTEC 124 - Radiographic Positioning 1B 4 units
- RTEC 217 - Clinical Experience 4 7 units
- RTEC 218 - Clinical Experience 5 7 units
- RTEC 233 - Radiographic Positioning 2 3 units
- RTEC 244 - Radiation Physics, Equipment, and Safety 4 units
- RTEC 255 - Advanced Imaging and Special Procedures 4 units
- MEDT 1 - Medical Terminology 3 units

Total Units: 58

Students must complete RTEC 217, RTEC 218, RTEC 233, RTEC 244 and RTEC 255 at El Camino College. Radiologic Technology students must complete the general education requirements described in the college catalog (see A.S. Degree requirements), to be eligible for certification by the American Registry of Radiologic Technologists (ARRT).

Respiratory Care, AS

Health Sciences and Athletics Division

www.elcamino.edu/academics/healthsciences

The degree and certificate in respiratory care are awarded after successful completion of the advanced registry level respiratory care program. The program is designed for students planning to become California licensed respiratory care practitioners and registered respiratory care practitioners. Completion of the requirements also allows students to apply for all state and national advanced specialty credentialing examinations. Students will acquire the skills to provide a wide range of high technology and high-touch therapeutic interventions to patients in acute and chronic care settings. Competencies are assessed through the use of classroom, laboratory, and clinical performance evaluations in simulated and actual patient care situations. Program success is determined through examining attrition rates, employment rates and licensure exam pass rates.

General Information

Students without previous medical training are strongly advised to complete RC 170. Students must complete all other non-respiratory coursework required for the Associate in Science degree in respiratory care. The program has three phases that require specific courses and sequence.

For more program and admission information, go to www.elcamino.edu/academics/healthsciences/respiratorycare.

Preclinical Phase

In the pre-clinical phase of the program, the student takes all the non-clinical Respiratory Care courses, which may include RC 170. The student shall also complete, at a minimum, RC 172 and RC 174, ANAT 30, CIS 13, ENGL 1A and the associate's degree mathematics competency. In addition, due to the rigorous schedule in the clinical phase, it is recommended the student complete all the other general education and science courses required for the Associate in Science degree. For example, Psychology, Humanities, as well as Health and Physical Education courses or equivalent. (See academic counselor for specific coursework required for the associate degree in Respiratory Care.)

Admission to the Clinical Phase

Admission to the clinical phase of the program is limited by clinical space and budget considerations. In order to gain admittance to the clinical phase of the program, the student must complete the preclinical phase with a minimum grade of C in all courses. The student must also submit a program application and completed physical exam form with the required lab tests and readiness for clinical duties certified by an appropriate health care professional. Students may submit completed applications and physical exam forms when all the required preclinical coursework is completed. Applications are accepted by the program director up to the last day of the spring semester and students are assigned seats in the next clinical class based on verification of all required coursework, available space, qualifications, and academic merit. A new clinical class starts in the summer session each year.

Initial-Clinical Associate Degree Phase

In this clinical phase of the program, the student takes all the combined Respiratory Care science classroom and clinical courses required to receive the Respiratory Care program degree which, at a minimum, includes RC 176, RC 178, RC 280, RC 282, RC 286, 288, 289, 290, RC 294, RC 295, 298. In addition, the student must complete all other courses required for the Associate in Science degree in respiratory care if they have not been completed in the preclinical phase. This phase always starts with the admission to RC 176 in the summer session of any given year.

Final-Clinical Certificate of Achievement Phase

Two semesters of additional classroom/clinical advanced coursework are required to complete the requirements for the associate degree and the certificate of achievement from the advanced registry-level Respiratory Care program. The courses in this phase are RC 284, 291, RC 292, RC 293, 296, 297. This phase follows the associate degree phase and ends at the end of the spring semester, two years after admission to RC 176, ending with the awarding of the associate degree and certificate of achievement from the advanced respiratory care program.

Program Costs

In addition to tuition fees charged by the college, it is estimated that the cost of books, lab costs, stethoscopes and miscellaneous supplies is approximately \$3,500 over a two-year period. Financial assistance is available to students who meet the eligibility requirements.

Admission Requirements and Length of Program

For the high school graduate with a C average or better in science and math, the program will take at least 2 1/2 years to complete, including all prerequisites. A student is formally accepted into the clinical phase of the program after satisfactory completion of prerequisites, general education courses, and introductory respiratory care science courses.

Procedure for Admission

The student should apply for a reservation to register at El Camino College. An appointment with a Health Science counselor should be made so that the matriculation process can be completed. Students wishing to take advanced college work after graduation may choose a specific general education track. All respiratory care science and clinical courses must be taken and completed with at least a C or better.

For more program and admission information, go to www.elcamino.edu/academics/healthsciences/respiratorycare.

For Gainful Employment program information, please visit www.elcamino.edu/academics/healthsciences/respiratorycare.

Program Prerequisites

- ANAT 30 - Essentials of Anatomy and Physiology 4 units
- CIS 13 - Computer Information Systems 3 units
- ENGL 1A - Reading and Composition 4 units
- PSYC 5 - General Psychology 3 units
- RC 172 - Fundamentals of Cardiopulmonary Physiology and Pharmacology in Respiratory Care 3 units
- RC 174 - Introduction to Respiratory Care Equipment and Patient Care Procedures 3 units

Total Units: 20

Required Core:

- RC 176 - Introduction to the Respiratory Care of the Non-Critically Ill Patient 6 units
- RC 178 - Respiratory Care of the Critically Ill Patient I 8 units
- RC 280 - Respiratory Care of the Critically Ill Patient II 9 units
- RC 282 - Fundamentals of Perinatal and Pediatric Respiratory Care 4 units
- RC 286 - Fundamentals of Pulmonary Rehabilitation and Home Respiratory Care 3 units
- RC 288 - Fundamentals of Pulmonary Function Testing 3 units
- RC 289 - Advanced Respiratory Care of the Asthmatic Patient 3 units
- RC 290 - Advanced Specialty Respiratory Gases 2 units
- RC 294 - Pulmonary Function Testing in Advanced Respiratory Care 4 units
- RC 295 - Pharmacology in Advanced Respiratory Care 3 units
- RC 298 - Advanced Emergency Management 3 units

Total Units: 48

Note: Students without previous medical training are strongly advised to complete RC 170.

Welding, AS

Industry and Technology Division

www.elcamino.edu/academics/indtech

The welding program prepares students for employment in the field and provides opportunities for currently employed personnel to upgrade their skills. By completing the degree or certificate requirements, students gain proficiency in oxy-acetylene cutting, plasma arc cutting, shielded metal arc welding, gas metal arc welding, gas tungsten arc welding, and flux cored welding. Students develop skills in welding ferrous and non-ferrous alloys in flat, horizontal, vertical, and overhead positions and gain skills in layout, fabrication, reading engineering drawings and pipe welding. The program also provides training for students to prepare for AWS D1.1 certification. Competencies will be assessed regularly in accordance with criteria established by the American Welding Society (AWS), the American Petroleum Institute, the American Society of Mechanical Engineers and the American National Standards Institute. At least 50 percent of the major requirements for the Associate in Science degree must be completed at El Camino College. For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/welding/.

Required Core: 8 units

- WELD 1A - Introduction to Multi-Process Welding 4 units
- WELD 1B - Advanced Welding for Manufacturing 4 units
- WELD 10A - Introduction to Shielded Metal Arc Welding (SMAW) 4 units
- WELD 10B - Intermediate Shielded Metal Arc Welding (SMAW) 4 units
- WELD 10C - Advanced Certification and Career Preparation Lab 2 units
- WELD 29 - Blueprint Reading 3 units
- WELD 40A - Introduction to Gas Tungsten Arc Welding (GTAW) 3 units

8 units from:

- WELD 28 - American Welding Society (AWS) D1.1 Certification Test Preparation 3 units
- WELD 40B - Intermediate Gas Tungsten Arc Welding (GTAW) 3 units
- WELD 45 - Structural Fabrication 5 units

5-6 units from:

- WELD 15 - Basic Welding for Allied Fields 3 units
- WELD 20A - Flux Core and Gas Metal Arc Welding 4 units
- WELD 23 - Advanced Arc Welding Specialty Lab 2 units
- WELD 40C - Advanced Gas Tungsten Arc Welding (GTAW) Skills Lab 2 units

Total Units: 26-28

Recommended Electives:

Note: Students granted course credit for WELD 10A or WELD 40A may take an elective to satisfy the unit requirement for the degree and certificate.

- ACR 5 - Electrical Applications 4 units
- ACR 61 - Fundamentals of Automation Systems 3 units
- BUS 17 - Personal Finance 3 units
- CADD 5 - Introduction to Mechanical Drafting 3 units
- CTEC 100 - Building Fundamentals 4 units
- MTT 10A - Introduction to CAD/CAM 3 units
- MTT 16 - General Metals 3 units
- MTT 101 - Introduction to Conventional and CNC Machining 4 units

Administration of Justice, AS-T

Industry and Technology Division

www.elcamino.edu/academics/indtech

The administration of justice program provides students with the ability to apply principles of the justice system, constitutional and procedural considerations affecting arrest, search and seizure, human relations, and concepts of criminal law as well as demonstrate proficiency in report writing and record keeping. Students completing this program will be prepared to transfer and major in criminal justice. Competencies will be assessed regularly in accordance with the California Commission on Peace Officers Standards and Training (P.O.S.T.) criteria.

The Associate in Science for Transfer (AS-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AS-T are guaranteed admission to the CSU system, but not to a particular campus or major. In order to earn an AS-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education - Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AS-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AS-T.

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/adminjustice.

Required Core: 6 units

- AJ 100 - Introduction to Administration of Justice 3 units
- AJ 103 - Concepts of Criminal Law I 3 units

List A: 6 units

- AJ 107 - Crime and Control - An Introduction to Corrections 3 units
- AJ 111 - Criminal Investigation 3 units
- AJ 115 - Community and Human Relations 3 units
- AJ 126 - Juvenile Delinquency and Legal Procedures 3 units
- AJ 130 - Criminal Procedures 3 units
- AJ 131 - Legal Aspects of Evidence 3 units
- AJ 132 - Forensic Crime Scene Investigation 3 units

List B: 6-7 units

- PSYC 5 - General Psychology 3 units
- SOCI 101 - Introduction to Sociology 3 units

- MATH 150 - Elementary Statistics with Probability 4 units
or
- PSYC 9A - Introduction to Statistics and Data Analysis for the Behavioral Sciences 4 units
or
- SOCI 109A - Introduction to Statistics and Data Analysis for the Behavioral Sciences 4 units

Total Units: 18-19

Business Administration, AS-T

Business Division

www.elcamino.edu/academics/business

The business administration program is designed to provide students with a foundation in basic accounting principles, business law, and macroeconomics and microeconomics theory. Students will be able to apply methodologies to assess fiscal and monetary policy in the marketplace and understand the basics of contract law. A degree in business offers students a wide variety of entry-level career opportunities in accounting, management, marketing, and office administration. Upon successful completion of the program, students will be prepared for entry-level careers and transfer to major in Business Administration. Competencies will be assessed through examination and projects.

The Associate in Science in Business Administration for Transfer (AS-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AS-T are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AS-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education - Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AS-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AS-T.

Required Core: 17-18 units

- BUS 1A - Financial Accounting 4 units
- BUS 1B - Managerial Accounting 4 units
- ECON 1 - Principles of Economics: Macroeconomics 3 units
- ECON 2 - Principles of Economics: Microeconomics Theory 3 units

- LAW 4 - Legal Environment of Business 4 units
or
- LAW 5 - Business Law 3 units

List A: 4-5 units

(select one)

- MATH 140 - Finite Mathematics for Business and Social Sciences 4 units
- MATH 150 - Elementary Statistics with Probability 4 units

- MATH 160 - Calculus I for the Biological, Management and Social Sciences 4 units
or
- MATH 165 - Calculus for Business and Social Sciences 5 units
or
- MATH 190 - Single Variable Calculus and Analytic Geometry I 5 units

List B: 6-7 units

(select two)

- CIS 13 - Computer Information Systems 3 units

- BUS 25 - Introduction to Business 3 units
or
- BUS 28 - Written Business Communications 3 units
or
- Any 4 unit Mathematics course from List A not already completed

Total Units: 27-30

Early Childhood Education, AS-T

Behavioral and Social Sciences Division

www.elcamino.edu/academics/behavioralsocial

The program prepares students for careers in private or public programs serving infants, toddlers, preschoolers, children with special needs, or children in before and after school care. The transfer degree option prepares students to continue studies at a four-year institution and major in Child Development, Child and Adolescent Development, Human Development, or Education. Students will acquire the ability to apply developmental theories in observing and assessing children in physical, cognitive, and psychosocial domains and will develop skills needed for working effectively with families, coworkers, and community agencies. Upon successful completion of the program, students will be prepared for careers in child care with infants and toddlers, preschool teaching, assistant teaching, and related careers in childhood education. Program assessment will be conducted regularly through examinations, presentations, student self-assessment, portfolios, and tracking student employment and promotion in the teaching field.

The Associate in Science for Transfer (AS-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AS-T are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AS-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education - Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AS-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AS-T.

Required Courses:

- CDEV 103 - Child Growth and Development 3 units
- CDEV 104 - The Home, The School, The Community 3 units
- CDEV 108 - Principles and Practices of Teaching Young Children 3 units
- CDEV 110 - Child Health, Safety, and Nutrition 3 units
- CDEV 112 - Teaching Young Children in a Diverse Society 3 units
- CDEV 114 - Observing and Assessing Young Children 3 units
- CDEV 115 - Introduction to Curriculum 3 units

- CDEV 125 - Child Development Practicum I 3 units
or
- CDEV 126 - Child Development Practicum II 3 units

Total Units: 24

Geology, AS-T

Natural Sciences Division

www.elcamino.edu/academics/naturalsciences

The geology program is designed to provide students the opportunity to obtain a transfer degree upon successful completion of the geology major requirements. The student will acquire the ability to apply the theory of plate tectonics, knowledge of geologic hazards, and principles of geologic time to natural phenomena. Laboratories complement the lecture material providing the student with a foundation in observational and interpretive techniques. Competencies are assessed by examining the student's ability to make careful observations of earth materials and processes, explain observations, predict future outcomes of earth processes, and successfully complete laboratory and field trip activities.

The Associate in Science for Transfer (AS-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AS-T are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AS-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education - Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AS-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AS-T.

Required Courses: 28 units

- GEOL 1 - Physical Geology 3 units
- GEOL 2 - History of Planet Earth 3 units
- GEOL 3 - Physical Geology Laboratory 1 unit
- GEOL 4 - History of Planet Earth Laboratory 1 unit
- CHEM 1A - General Chemistry I 5 units
- CHEM 1B - General Chemistry II 5 units
- MATH 190 - Single Variable Calculus and Analytic Geometry I 5 units
- MATH 191 - Single Variable Calculus and Analytic Geometry II 5 units

Total Units: 28

Mathematics, AS-T

Mathematical Sciences Division

www.elcamino.edu/academics/mathsciences

The mathematics program provides the student with sufficient depth to support a lifelong interest in mathematics, and is suitable for the student who plans to transfer in mathematics. The core of the major is the calculus sequence, in which the student will acquire a conceptual understanding of the principles of differential and integral calculus for functions of one and several variables, as well as the ability to apply calculus techniques in a variety of applications. One course in Differential Equations with Linear Algebra is required, as well as one additional course to provide the student with greater breadth in mathematics. Competency will be assessed by evaluating the student's ability to solve a wide range of calculus and other mathematical problems.

The Associate in Science for Transfer (AS-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AS-T degree are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AS-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education - Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AS-T degree will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AS-T degree.

Required Core: 15 units

- MATH 190 - Single Variable Calculus and Analytic Geometry I 5 units
- MATH 191 - Single Variable Calculus and Analytic Geometry II 5 units
- MATH 220 - Multi-Variable Calculus 5 units

List A: 5 units

- MATH 270 - Differential Equations with Linear Algebra 5 units

List B: 4-5 units

- CSCI 1 - Problem Solving and Program Design Using C++ 4 units
- CSCI 2 - Introduction to Data Structures 5 units
- CSCI 3 - Computer Programming in Java 4 units
- MATH 150 - Elementary Statistics with Probability 4 units
- MATH 150H - Honors Elementary Statistics with Probability 4 units
- MATH 210 - Introduction to Discrete Structures 5 units
- PHYS 1A - Mechanics of Solids 4 units
- PHYS 3A - General Physics with Calculus 5 units

Total Units: 24-25

Physics, AS-T

Natural Sciences Division

www.elcamino.edu/academics/naturalsciences

The physics program provides students with the ability to use and develop problem solving strategies that apply to physical concepts involving mechanics, thermodynamics, sound, light, electricity and magnetism, and modern physics. Laboratory activities establish a foundation in measurement and analysis techniques necessary to test, understand, and apply physical concepts. Upon completion of the program requirements, students will be prepared to transfer and major in physics. Competency will be assessed by evaluating the student's ability to quantitatively and qualitatively determine the results of physical situations.

The Associate in Science for Transfer (AS-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AS-T are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AS-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education - Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AS-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AS-T.

Required Courses: 26-27 units

- PHYS 1A - Mechanics of Solids 4 units

- PHYS 1C - Electricity and Magnetism 4 units
- and
- PHYS 1B - Fluids, Heat and Sound 3 units
- or
- PHYS 1D - Optics and Modern Physics 4 units

- MATH 190 - Single Variable Calculus and Analytic Geometry I 5 units
- MATH 191 - Single Variable Calculus and Analytic Geometry II 5 units
- MATH 220 - Multi-Variable Calculus 5 units

Total Units: 26-27

Accounting Certificate of Achievement

For Gainful Employment program information for the Business program options offered at El Camino College, please visit www.elcamino.edu/academics/business/accounting.

A Certificate of Achievement in Accounting will be granted upon completion of all program requirements. At least 15 units of the certificate requirements must be completed at El Camino College.

Required Courses:

- BUS 1A - Financial Accounting 4 units
- BUS 1B - Managerial Accounting 4 units
- BUS 2A - Intermediate Accounting 3 units
- BUS 2B - Intermediate Accounting 3 units
- BUS 4 - Cost Accounting 3 units
- BUS 5A - Income Tax Accounting 4 units
- CIS 13 - Computer Information Systems 3 units
- LAW 5 - Business Law 3 units

Total Units: 27

Administration of Justice Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/adminjustice.

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Courses:

- AJ 100 - Introduction to Administration of Justice 3 units
- AJ 103 - Concepts of Criminal Law I 3 units
- AJ 115 - Community and Human Relations 3 units
- AJ 130 - Criminal Procedures 3 units
- AJ 131 - Legal Aspects of Evidence 3 units
- AJ 135 - Report Writing 3 units
- AJ 170 - Constitutional Law for Criminal Justice 3 units

Total Units: 21

Air Conditioning and Refrigeration Electric Controls Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/acr

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Courses:

- ACR 5 - Electrical Applications 4 units
- ACR 6 - Refrigeration and Air Conditioning Control Systems 4 units
- ACR 30 - Electric Controls 2 units
- ACR 31 - HVAC Electronics 2 units
- ACR 34 - HVAC Customer Service and Industry Certifications 1 unit

Total Units: 13

Air Conditioning Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/acr

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Courses:

- ACR 5 - Electrical Applications 4 units
- ACR 21 - Air Conditioning Fundamentals 4 units
- ACR 25 - Energy Efficient Residential, Commercial and Industrial Air Conditioning 4 units
- ACR 27 - Heating Technologies 4 units
- ACR 34 - HVAC Customer Service and Industry Certifications 1 unit

Total Units: 17

Architecture Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/architecture.

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the requirements for the certificate must be completed at El Camino College.

Required Core: 26 units

- ARCH 100 - An Orientation to Architecture 1 unit
- ARCH 107 - World Architecture: Pre-History to Middle Ages 3 units
- ARCH 108 - World Architecture: Gothic to Early Modern 3 units
- ARCH 119 - Computer Aided Architectural Drafting 3 units
- ARCH 150A - Construction Documentation I 3 units
- ARCH 150B - Construction Documentation II 3 units
- ARCH 170 - Architectural Graphics Techniques 3 units
- ARCH 171 - Architectural Three-Dimensional Illustration 3 units
- ARCH 199 - Architecture Design Studio 4 units

12-13 units from:

- ARCH 121 - Building Information Modeling I 3 units
- ARCH 125 - Building Information Modeling II 3 units
- ARCH 158 - Structures Analysis - Timber 3 units
- ARCH 172 - Architectural Color Rendering Techniques 3 units
- ARCH 179 - Design/Build Studio 4 units
- ET 165 - Sustainable and Regenerative Practices in Site and Landscape Development 3 units

Total Units: 38-39

Automotive Brakes/Suspension Transmission/Drive Train Technician Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/autotech.

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

8 units from:

- ATEC 11 - Brakes, Suspension and Four Wheel Alignment 8 units
- ATEC 14 - Brakes 4 units
- ATEC 16 - Suspension and Four Wheel Alignment 4 units

8 units from:

- ATEC 33 - Transmissions, Drive Train and Drive Axles 8 units
- ATEC 34 - Automatic Transmissions 4 units
- ATEC 35 - Manual Transmission, Drive Train and Drive Axles 4 units

Total Units: 16

Automotive Collision Repair Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/autocollision.

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Complete 24 units from the following:

- ACRP 1A - Introduction to Automotive Collision Repair 8 units
- ACRP 1B - Collision Repair Equipment and Welding Techniques 8 units
- ACRP 1C - Major Collision Analysis and Repair 8 units
- ACRP 1D - Automotive Component Systems Analysis and Repair 8 units
- ACRP 3A - Introduction to Automotive Collision Estimating 3 units
- ACRP 3B - Computerized Collision Damage Estimating 3 units
- ACRP 4A - Beginning Automotive Collision Repair I 4 units
- ACRP 4B - Beginning Automotive Collision Repair II 4 units
- ACRP 4C - Intermediate Automotive Collision Repair I 4 units
- ACRP 4D - Intermediate Automotive Collision Repair II 4 units
- ACRP 20 - Automotive Collision Investigation 3 units
- ACRP 22 - Automotive Repair Fraud 3 units
- ACRP 24 - Automotive Collision Analysis 3 units
- ACRP 26 - Automotive Accident Reconstruction 3 units

Total Units: 24

Automotive Engine Rebuilding/Repair Technician Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/autotech.

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

8 units from:

- ATEC 41 - Engine Rebuilding 8 units
- ATEC 42 - Engine Repair 8 units

4 units from:

- ATEC 43 - Introduction to Engine Repair 4 units
- ATEC 45 - Automotive Machining 4 units

Total Units: 12

Automotive Painting and Refinishing Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/autocollision.

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Complete 24 units from the following:

- ACRP 1A - Introduction to Automotive Collision Repair 8 units
 - ACRP 2A - Basic Automotive Painting - Refinishing 8 units
 - ACRP 2B - Automotive Refinishing Materials and Equipment 8 units
 - ACRP 2C - Automotive Refinishing Applications 8 units
 - ACRP 3A - Introduction to Automotive Collision Estimating 3 units
 - ACRP 3B - Computerized Collision Damage Estimating 3 units
 - ACRP 5A - Beginning Automotive Painting I 4 units
 - ACRP 5B - Beginning Automotive Painting II 4 units
 - ACRP 5C - Intermediate Automotive Refinishing I 4 units
 - ACRP 5D - Intermediate Automotive Refinishing II 4 units
- or
- Any other Automotive Collision Repair/Painting course as approved for substitution by the department faculty.

Total Units: 24

Automotive Technician I Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/autotech.

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Core: 32 units

8 units from:

- ATEC 11 - Brakes, Suspension and Four Wheel Alignment 8 units
- ATEC 14 - Brakes 4 units
- ATEC 16 - Suspension and Four Wheel Alignment 4 units

8 units from:

- ATEC 22A - Introduction to Engine Performance, Electrical and Fuel Systems 8 units
- ATEC 23 - Engine Performance, Electrical and Fuel Systems 4 units
- ATEC 24 - Computer Controlled Engine Management, Fuel Systems and Emissions 4 units

8 units from:

- ATEC 22B - Electrical, Electronics and Computer Controlled Systems 8 units
- ATEC 25 - Automotive Electrical Systems 4 units
- ATEC 26 - Automotive Testing and Diagnosis 4 units

8 units from:

- ATEC 33 - Transmissions, Drive Train and Drive Axles 8 units
- ATEC 34 - Automatic Transmissions 4 units
- ATEC 35 - Manual Transmission, Drive Train and Drive Axles 4 units

one course from:

- ATEC 41 - Engine Rebuilding 8 units
- ATEC 42 - Engine Repair 8 units
- ATEC 43 - Introduction to Engine Repair 4 units
- ATEC 45 - Automotive Machining 4 units

Total Units: 36-40

Automotive Technician II Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/autotech.

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Core: 32 units

8 units from:

- ATEC 11 - Brakes, Suspension and Four Wheel Alignment 8 units
- ATEC 14 - Brakes 4 units
- ATEC 16 - Suspension and Four Wheel Alignment 4 units

8 units from:

- ATEC 22A - Introduction to Engine Performance, Electrical and Fuel Systems 8 units
- ATEC 23 - Engine Performance, Electrical and Fuel Systems 4 units
- ATEC 24 - Computer Controlled Engine Management, Fuel Systems and Emissions 4 units

8 units from:

- ATEC 22B - Electrical, Electronics and Computer Controlled Systems 8 units
- ATEC 25 - Automotive Electrical Systems 4 units
- ATEC 26 - Automotive Testing and Diagnosis 4 units

8 units from:

- ATEC 33 - Transmissions, Drive Train and Drive Axles 8 units
- ATEC 34 - Automatic Transmissions 4 units
- ATEC 35 - Manual Transmission, Drive Train and Drive Axles 4 units

one course from:

- ATEC 41 - Engine Rebuilding 8 units
- ATEC 42 - Engine Repair 8 units
- ATEC 43 - Introduction to Engine Repair 4 units
- ATEC 45 - Automotive Machining 4 units

Complete 6-10 units from:

- ENGL A - Writing the College Essay 3 units
or
- Qualifying score for English 1A on the English Placement Test

- MTT 46 - Basic Machine Tool Operation 3 units
- MTT 101 - Introduction to Conventional and CNC Machining 4 units
- WELD 15 - Basic Welding for Allied Fields 3 units

Total Units: 42-50

Automotive Tune-Up Technician Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/autotech.

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

8 units from:

- ATEC 22A - Introduction to Engine Performance, Electrical and Fuel Systems 8 units
- ATEC 23 - Engine Performance, Electrical and Fuel Systems 4 units
- ATEC 24 - Computer Controlled Engine Management, Fuel Systems and Emissions 4 units

8 units from:

- ATEC 22B - Electrical, Electronics and Computer Controlled Systems 8 units
- ATEC 25 - Automotive Electrical Systems 4 units
- ATEC 26 - Automotive Testing and Diagnosis 4 units

Total Units: 16

Business Information Worker Certificate of Achievement

For Gainful Employment program information for the Business program options offered at El Camino College, please visit www.elcamino.edu/academics/business/businessmgmt.

A Certificate of Achievement will be granted upon completion of all program requirements.

Required Courses:

- BUS 22 - Human Relations in Organizations 3 units
- BUS 60A - Microcomputer Keyboarding I 1 unit
- BUS 29 - Oral Business Communications 3 units
- BUS 28 - Written Business Communications 3 units
- CIS 2 - Office Applications 3 units
- CIS 13 - Computer Information Systems 3 units
- CIS 26 - Using Microsoft Excel 3 units

Total Units: 19

Business Management Certificate of Achievement

For Gainful Employment program information for the Business program options offered at El Camino College, please visit www.elcamino.edu/academics/business/businessmgmt.

A Certificate of Achievement in Business Management will be granted upon completion of all program requirements. A minimum of 12 units must be completed at El Camino College.

Required Courses:

- BUS 20 - Business Management 3 units
- BUS 21 - Human Resources Management 3 units
- BUS 22 - Human Relations in Organizations 3 units
- BUS 25 - Introduction to Business 3 units
- BUS 28 - Written Business Communications 3 units
- BUS 29 - Oral Business Communications 3 units

Total Units: 18

Business Programming Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/business/cis.

A Certificate of Achievement in Business Programming will be granted upon completion of all program requirements. A minimum of 15 units must be completed at El Camino College.

Required Core: 9 units

- CIS 13 - Computer Information Systems 3 units
- CIS 18 - Systems Analysis and Design 3 units
- CIS 19 - Internet, Social Networking, and the Web 3 units

13 units from:

- CIS 16 - Application Development and Programming Using Visual Basic.Net 3 units
- CIS 28 - Database Management using Microsoft Access 3 units
- CIS 30 - Introduction to eCommerce 3 units
- CIS 134 - ASP.NET with C# Business Web Programming 4 units

or

- CIS 84 - MySQL Database Programming for the Web 3 units
- CIS 132 - Web Development using HTML5, CSS3, and Word Press 3 units
- CIS 133 - Mashup JavaScript, jQuery and AJAX 4 units
- CIS 136 - Building Mobile Apps 3 units

Total Units: 22

Cabinet and Fine Woodworking Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/constructiontech.

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Core: 8 units

- CTEC 200 - General Cabinet Making 2 units
- CTEC 201 - Upper Residential Cabinets 2 units
- CTEC 202 - Base Residential Cabinets 2 units
- CTEC 203 - Dedicated Use Cabinets 2 units

11 units from:

- CTEC 210 - Furniture Making Laboratory - Interpreting Commercial Plans 1.5 units
- CTEC 211 - Furniture Making Laboratory - Plan Modifications 1.5 units
- CTEC 212 - Furniture Making Laboratory - Developing Original Plans 1.5 units
- CTEC 213 - Furniture Making Laboratory - Building without Plans 1.5 units
- CTEC 220 - Hinging Systems and Doors 2.5 units
- CTEC 221 - Drawer Systems 2.5 units
- CTEC 222 - Convenience Hardware 2.5 units
- CTEC 230 - Cabinet Making Lab 1.5 units
- CTEC 231 - Intermediate Cabinet Making Lab 1.5 units

Total Units: 19

Cloud Computing and Programming with Amazon Web Services Certificate of Achievement

A Certificate of Achievement will be granted upon completion of the required courses completed with a minimum grade of "B". At least 12 units must be completed at El Camino College.

Required Courses:

- CIS 134 - ASP.NET with C# Business Web Programming 4 units
- CIS 150 - Cloud Computing with AWS 3 units
- CIS 152 - Data Storage with AWS 3 units
- CIS 154 - Compute Engines with AWS 3 units
- CIS 156 - Security with AWS 3 units

Total Units: 16

CNC Machine Operator Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/mtt.

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificates must be completed at El Camino College.

Required Courses: 16 units

- MTT 101 - Introduction to Conventional and CNC Machining 4 units
- MTT 103 - Conventional and CNC Turning 4 units
- MTT 105 - Conventional and CNC Milling 4 units
- MTT 107 - Advanced Manufacturing Processes 4 units

Total Units: 16

Commercial Music Certificate of Achievement

A Certificate of Achievement will be granted upon completion of all program requirements. MUSI 182, MUSI 284 and MUSI 285 must be completed at El Camino College.

Required Courses:

- MUSI 101 - Music Fundamentals 3 units
- MUSI 180 - Fundamentals of Electronic Music 2 units
- MUSI 181A - Introduction to Electronic Music Studio 2 units
- MUSI 181B - Electronic Music Studio 2 units
- MUSI 182 - Digital Audio Recording for Commercial Music 3 units
- MUSI 284 - Commercial Music Business Studies 3 units
- MUSI 285 - Songwriting for Commercial Music 3 units

Total Units: 20

Computer Aided Design/Drafting Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/cadd/.

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Core: 23.5

- CADD 5 - Introduction to Mechanical Drafting 3 units
- CADD 7 - Solid Modeling, Assemblies and Two Dimensional (2D) Drawings 3 units
- CADD 28 - Parametric Three Dimensional (3D) Modeling and Assemblies 2 units
- CADD 31 - Orientation to CATIA 2 units
- CADD 32 - Product Modeling with CATIA 2 units
- CADD 33 - Analyses and Simulations with CATIA 2 units
- CADD 37 - Advanced CATIA Functions 2 units
- CADD 43 - Design Process and Concepts 4.5 units
- CADD 45 - Geometrical Dimensioning and Tolerancing 3 units

3-4 units from:

- ECHT 11 - Introduction to Electronics 3 units
- ECHT 22 - Basic Electronic Fabrication 3 units
- MTT 16 - General Metals 3 units
- MTT 46 - Basic Machine Tool Operation 3 units
- MTT 101 - Introduction to Conventional and CNC Machining 4 units
- WELD 15 - Basic Welding for Allied Fields 3 units
- ART 141 - Digital Art Fundamentals 3 units
- ART 144 - 3D Modeling and Animation 3 units
- CIS 13 - Computer Information Systems 3 units

Total Units: 26.5 - 27.5

Computer Hardware Electronics Technician Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/electronics.

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Core: 24 units

- ECHT 11 - Introduction to Electronics 3 units
- ECHT 22 - Basic Electronic Fabrication 3 units
- ECHT 110 - Introduction to Direct and Alternating Current Circuits 3 units
- ECHT 130 - Digital Systems and Computer Logic I 3 units
- ECHT 140 - Computer Systems and Hardware Technologies I 4 units
- ECHT 142 - Computer Systems and Hardware Technologies II 4 units
- ECHT 144 - CompTIA A+ Certification Preparation for Computer Hardware Systems 4 units

two courses from:

- ECHT 95 - Cooperative Work Experience Education 2-4 units
- ECHT 191 - Introduction to Microprocessors and Interfacing 3 units
- CIS 13 - Computer Information Systems 3 units
- CIS 40 - Personal Computer Support and Networking 3 units

Total Units: 29-31

Computer Science Certificate of Achievement

A Certificate of Achievement will be granted upon completion of all program requirements. A minimum of 16 units must be completed at El Camino College.

Required Core: 9 units

- CSCI 1 - Problem Solving and Program Design Using C++ 4 units
- CSCI 2 - Introduction to Data Structures 5 units

12-13 units from:

- CSCI 3 - Computer Programming in Java 4 units
- CSCI 12 - Programming for Internet Applications using PHP, JavaScript, and XHTML 5 units
- CSCI 14 - Computer Programming in Python for Computer Science 4 units
- CSCI 30 - Advanced Programming in C++ 4 units
- CSCI 40 - Introduction to UNIX and LINUX Operating Systems 4 units
- MATH 210 - Introduction to Discrete Structures 5 units

Total Units: 21-22

Computer Systems Applications Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/business/cis.

A Certificate of Achievement in Computer Systems Applications will be granted upon completion of all program requirements. A minimum of 15 units must be completed at El Camino College.

Required Core: 15 units

- CIS 13 - Computer Information Systems 3 units
- CIS 18 - Systems Analysis and Design 3 units
- CIS 19 - Internet, Social Networking, and the Web 3 units
- CIS 26 - Using Microsoft Excel 3 units
- CIS 28 - Database Management using Microsoft Access 3 units

Programming: 3-4 units

- CIS 16 - Application Development and Programming Using Visual Basic.Net 3 units
- CIS 133 - Mashup JavaScript, jQuery and AJAX 4 units
- CIS 134 - ASP.NET with C# Business Web Programming 4 units
- CIS 136 - Building Mobile Apps 3 units

User Support: 3 units

- CIS 11 - Help Desk Operations 3 units
- CIS 30 - Introduction to eCommerce 3 units
- CIS 40 - Personal Computer Support and Networking 3 units

Total Units: 21-22

Computer User Support Specialist Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/business/cis.

A Certificate of Achievement will be granted upon completion of all program requirements with a minimum grade of "B". At least 15 Computer Information Systems units must be completed at El Camino College

Required Courses:

- BUS 28 - Written Business Communications 3 units
- BUS 29 - Oral Business Communications 3 units
- BUS 60A - Microcomputer Keyboarding I 1 unit
- CIS 11 - Help Desk Operations 3 units
- CIS 13 - Computer Information Systems 3 units
- CIS 28 - Database Management using Microsoft Access 3 units
- CIS 40 - Personal Computer Support and Networking 3 units

Total Units: 19

Construction Technology Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/constructiontech.

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Core: 18 units

- CTEC 100 - Building Fundamentals 4 units
- CTEC 110 - Additions and Remodeling 4 units
- CTEC 172 - Residential Electrical Wiring 4 units
- CTEC 180 - Residential Plumbing 4 units
- CTEC 200 - General Cabinet Making 2 units

16 units from:

- ACR 21 - Air Conditioning Fundamentals 4 units
- ARCH 179 - Design/Build Studio 4 units
- CADD 5 - Introduction to Mechanical Drafting 3 units
- CTEC 95 - Cooperative Work Experience Education 2-4 units
- CTEC 121 - Concrete and Formwork 4 units
- CTEC 122 - Rough Framing 4 units
- CTEC 131 - Roof Framing 4 units
- CTEC 132 - Stair Framing 4 units
- CTEC 141 - Interior Subcrafts 4 units
- CTEC 142 - Exterior Subcrafts 4 units
- CTEC 150 - Contract Estimating 3 units
- CTEC 160 - Business and Legal Aspects of Contracting 3 units
- CTEC 201 - Upper Residential Cabinets 2 units
- CTEC 202 - Base Residential Cabinets 2 units
- CTEC 203 - Dedicated Use Cabinets 2 units
- ET 102 - Sustainable Energy and Renewable Building Sciences and Technologies 3 units
- WELD 15 - Basic Welding for Allied Fields 3 units

Total Units: 34

Cosmetology Level II Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/cosmetology.

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Core: 13 units

Completion of Level I Certificate of Accomplishment

- COSM 1 - Introduction to Cosmetology Procedures 13 units
- or
- COSM 10 - Introduction to Cosmetology I 6.5 units
- and
- COSM 11 - Introduction to Cosmetology II 6.5 units
- 28-29 units from:
 - COSM 2A - Intermediate Cosmetology 8 units
 - COSM 2B - Advanced Cosmetology 8 units
 - COSM 2C - Advanced Cosmetology and Introduction to State Board Review 8 units
 - COSM 2D - Advanced Preparation for State Board Review 8 units
- COSM 3 - Advanced Cosmetology Applications 5 units
- or
- COSM 4 - Cosmetology Practicum 4 units

Total Units: 41-42

Database Management Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/business/cis.

Required Courses:

- CIS 13 - Computer Information Systems 3 units
- CIS 18 - Systems Analysis and Design 3 units
- CIS 28 - Database Management using Microsoft Access 3 units
- CIS 29 - Advanced Database Applications 3 units
- CIS 80 - Database Programming 4 units
- CIS 119 - Introduction to Computer Security 3 units
- CIS 134 - ASP.NET with C# Business Web Programming 4 units

Total Units: 23

Digital Arts Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/finearts/art.

A Certificate of Achievement will be granted upon completion of all program requirements. A minimum of 12 units required for the certificate must be completed at El Camino College.

Required Core: 5-6 units

- ART 110 - Drawing Fundamentals I 3 units
- ART 129 - Fundamentals of Color 3 units
- ART 130 - Two-Dimensional Design I 3 units
- ART 131 - Lettering and Typography I 3 units
- ART 160 - Three-Dimensional Design 3 units
- PHOT 101 - Elementary Photography 2 units
- FILM 120 - Introduction to Film/Video Production 3 units

3 units from:

- ART 101 - Art and Visual Culture: A Global Perspective 3 units
- ART 150 - The Art of Photography 3 units
or
- PHOT 150 - The Art of Photography 3 units
- FILM 105 - Media Aesthetics 3 units

6 units from:

- ART 141 - Digital Art Fundamentals 3 units
- ART 142 - Digital Imaging Fundamentals 3 units
- ART 143 - Digital Publishing Fundamentals 3 units

6 units from:

- ART 144 - 3D Modeling and Animation 3 units
- ART 145 - Web Animation and Games 3 units
- ART 146 - Designing for the World Wide Web 3 units
- ART 147 - Motion Graphics 3 units

6-7 units from:

- ART 132 - Advertising Design I 3 units
- ART 133 - Graphic Design 3 units
- ART 152 - Rendering 3 units
- ART 153 - Illustration I 3 units
- ART 181 - Beginning Sculpture 3 units
- ART 217 - Life Drawing I 3 units
- ART 222 - Fundamentals of Painting I 3 units
- ART 253 - Illustration II 3 units
- ART 290 - Screen Printing 3 units
- CIS 133 - Mashup JavaScript, jQuery and AJAX 4 units
- CIS 136 - Building Mobile Apps 3 units
- FILM 109 - Introduction to Media Writing 3 units
- FILM 113 - Screenplay Analysis 3 units
- PHOT 102 - Basic Photography 3 units
- PHOT 204 - Portraiture 3 units
- THEA 113 - Introduction to Acting 3 units

5 units from:

- ART 96 - Cooperative Work Experience Education 2-4 units
- ART 99 - Independent Study 1-3 units
- ART 195 - Portfolio and Career Planning for Artists and Designers 3 units

Total Units: 31-33

Early Childhood Education Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/behavioralsocial/childhooded/index.asp.

A Certificate of Achievement will be granted upon completion of all program requirements. A minimum of 12 units must be completed at El Camino College.

Required Core: 15 units

- CDEV 103 - Child Growth and Development 3 units
- CDEV 104 - The Home, The School, The Community 3 units
- CDEV 108 - Principles and Practices of Teaching Young Children 3 units
- CDEV 112 - Teaching Young Children in a Diverse Society 3 units
- CDEV 114 - Observing and Assessing Young Children 3 units

3 units from:

- CDEV 115 - Introduction to Curriculum 3 units
- CDEV 116 - Creative Art for Young Children 3 units
- CDEV 117 - Music and Movement for Young Children 3 units
- CDEV 118 - Science and Math for Young Children 3 units
- CDEV 119 - Language Arts for Young Children 3 units

Total Units: 18

Note: Proof of a valid Pediatric CPR and First Aid Certification and immunization may be required for employment.

Early Intervention Assistant Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/behavioralsocial/childhooded/index.asp.

A Certificate of Achievement will be granted upon completion of all program requirements. A minimum of 12 units must be completed at El Camino College.

Required Core: 21 units

- CDEV 103 - Child Growth and Development 3 units
- CDEV 104 - The Home, The School, The Community 3 units
- CDEV 106 - Care and Education for Infants and Toddlers 3 units

or

- CDEV 107 - Infant/Toddler Development 3 units
- CDEV 110 - Child Health, Safety, and Nutrition 3 units
- CDEV 150 - Introduction to Children with Special Needs 3 units
- CDEV 152 - Curriculum and Strategies for Children with Special Needs 3 units
- CDEV 169 - Special Education Practicum 3 units

6 units from:

- CDEV 115 - Introduction to Curriculum 3 units
- CDEV 116 - Creative Art for Young Children 3 units
- CDEV 117 - Music and Movement for Young Children 3 units
- CDEV 118 - Science and Math for Young Children 3 units
- CDEV 119 - Language Arts for Young Children 3 units

3 units from:

- CDEV 106 - Care and Education for Infants and Toddlers 3 units
- CDEV 107 - Infant/Toddler Development 3 units
- CDEV 114 - Observing and Assessing Young Children 3 units
- CDEV 165 - Autism, ADHD, Physical and Health Impairments 3 units

Total Units: 30

Note: Proof of a valid Pediatric CPR and First Aid Certification and immunizations may be required for employment. Courses may not be counted in more than one category.

Electronics Engineering Technician Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/electronics.

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Core: 22 units

- ECHT 11 - Introduction to Electronics 3 units
- ECHT 22 - Basic Electronic Fabrication 3 units
- ECHT 110 - Introduction to Direct and Alternating Current Circuits 3 units
- ECHT 120 - Semiconductor Circuits I 3 units
- ECHT 124 - Operational Amplifiers and Linear Integrated Circuits 3 units
- ECHT 130 - Digital Systems and Computer Logic I 3 units
- ECHT 140 - Computer Systems and Hardware Technologies I 4 units

two courses from:

- ECHT 95 - Cooperative Work Experience Education 2-4 units
- ECHT 142 - Computer Systems and Hardware Technologies II 4 units
- ECHT 144 - CompTIA A+ Certification Preparation for Computer Hardware Systems 4 units
- ECHT 191 - Introduction to Microprocessors and Interfacing 3 units

Total Units: 27-30

Engineering Technician Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/engineeringtec.

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Core: 16 units

- ETEC 10 - Principles of Engineering Technology 3 units
or
- ETEC 10A - Principles of Engineering Technology I 1.5 units
and
- ETEC 10B - Principles of Engineering Technology II 1.5 units

- ETEC 12 - Introduction to Engineering Design 3 units
or
- ETEC 12A - Introduction to Engineering Design I 1.5 units
and
- ETEC 12B - Introduction to Engineering Design II 1.5 units

- ETEC 14 - Electronics for Engineering Technologists 3 units
or
- ETEC 14A - Electronics for Engineering Technologists I 1.5 units
and
- ETEC 14B - Electronics for Engineering Technologists II 1.5 units

- ETEC 16 - Computer Integrated Manufacturing 3 units
or
- ETEC 16A - Computer Integrated Manufacturing I 1.5 units
and
- ETEC 16B - Computer Integrated Manufacturing II 1.5 units

- MTT 101 - Introduction to Conventional and CNC Machining 4 units

5-9 units from:

- ETEC 15 - Aerospace Engineering 3 units
or
- ETEC 15A - Aerospace Engineering I 1.5 units
and
- ETEC 15B - Aerospace Engineering II 1.5 units

- ETEC 18 - Engineering Design and Development 3 units
or
- ETEC 18A - Engineering Design and Development I 1.5 units
and
- ETEC 18B - Engineering Design and Development II 1.5 units

- MTT 16 - General Metals 3 units

- CADD 28 - Parametric Three Dimensional (3D) Modeling and Assemblies 2 units
- ECHT 22 - Basic Electronic Fabrication 3 units
- MTEC 70 - Basic Robotics 2 units
- MTEC 75A - Integrated Robotic and Automated Technologies I 1.5 units and
- MTEC 75B - Integrated Robotic and Automated Technologies II 1.5 units
- WELD 15 - Basic Welding for Allied Fields 3 units

Total Units: 21-25

Engineering Technology Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/engineeringtec.

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Core: 26 units

- ETEC 10 - Principles of Engineering Technology 3 units
or
- ETEC 10A - Principles of Engineering Technology I 1.5 units
and
- ETEC 10B - Principles of Engineering Technology II 1.5 units
- ETEC 12 - Introduction to Engineering Design 3 units
or
- ETEC 12A - Introduction to Engineering Design I 1.5 units
and
- ETEC 12B - Introduction to Engineering Design II 1.5 units
- ETEC 14 - Electronics for Engineering Technologists 3 units
or
- ETEC 14A - Electronics for Engineering Technologists I 1.5 units
and
- ETEC 14B - Electronics for Engineering Technologists II 1.5 units
- ETEC 16 - Computer Integrated Manufacturing 3 units
or
- ETEC 16A - Computer Integrated Manufacturing I 1.5 units
and
- ETEC 16B - Computer Integrated Manufacturing II 1.5 units
- CHEM 1A - General Chemistry I 5 units
- MATH 190 - Single Variable Calculus and Analytic Geometry I 5 units
- PHYS 2A - General Physics 4 units

3-7 units from:

- CIS 13 - Computer Information Systems 3 units
- ECHT 110 - Introduction to Direct and Alternating Current Circuits 3 units
- ENGR 1 - Introduction to Engineering 2 units
- ENGR 9 - Engineering Mechanics - Statics 3 units
- ETEC 15 - Aerospace Engineering 3 units
or
- ETEC 15A - Aerospace Engineering I 1.5 units
and
- ETEC 15B - Aerospace Engineering II 1.5 units
- ETEC 18 - Engineering Design and Development 3 units
or
- ETEC 18A - Engineering Design and Development I 1.5 units
and
- ETEC 18B - Engineering Design and Development II 1.5 units
- MTT 101 - Introduction to Conventional and CNC Machining 4 units
- MTEC 70 - Basic Robotics 2 units
- MTEC 75A - Integrated Robotic and Automated Technologies I 1.5 units

and

- MTEC 75B - Integrated Robotic and Automated Technologies II 1.5 units

Total Units: 29-33

Environmental Horticulture Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/naturalsciences/Horticulture.

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the requirements for the certificate must be completed at El Camino College.

Required Core: 21 units

- HORT 41 - General Horticulture 3 units
- HORT 42 - Plant Propagation 3 units
- HORT 46 - Pest Control 3 units
- HORT 53 - Soils and Fertilizers 3 units
- HORT 54 - Landscape Design 3 units
- HORT 55 - Plant Identification - Trees 3 units
- HORT 56 - Plant Identification - Shrubs, Vines, and Groundcovers 3 units

one course from:

- BIOL 8 - Biology of Plants 4 units
- BIOL 15 - Environmental Aspects of Biology 3 units
- BIOL 16 - Field Entomology 4 units
- HORT 44 - Ecology of Edible, Medicinal and Poisonous Plants 3 units
- HORT 60 - Basic Landscape Irrigation 3 units

Total Units: 23-25

Fashion Design and Production Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/fashion.

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Core: 25 units

- FASH 1 - Career Opportunities in Fashion 1 unit
- FASH 2 - Presentation Techniques for Fashion 1 unit
- FASH 4 - Computer Fashion Illustration 3 units
- FASH 10 - Clothing Construction I 3 units
- FASH 14 - Apparel Production Techniques 1 unit
- FASH 15 - Beginning Fashion Illustration 2 units
- FASH 20 - Textiles 3 units
- FASH 26A - Basic Design and Patternmaking 3 units
- FASH 26B - Basic Dress Design through Draping Process 3 units
- FASH 41 - Fashion Analysis and Selection 3 units
- FASH 95 - Cooperative Work Experience Education 2-4 units

4-6 units from:

- FASH 11 - Clothing Construction II 3 units
- FASH 16 - Intermediate Contemporary and Historical Fashion Illustration 2 units
- FASH 18 - Advanced Fashion Illustration Portfolio Techniques 2 units
- FASH 23 - Fitting and Alterations 2 units
- FASH 29 - Computer Pattern Design/Patternmaking 3 units
- FASH 31 - History of Costume 3 units
- FASH 35 - Applied Color Theory 2 units
- FASH 44 - Fashion Show Production and Promotions 3 units

Total Units: 29-31

Fashion Merchandising Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/fashion.

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Core: 29 units

- BUS 15 - Business Mathematics 3 units
- FASH 1 - Career Opportunities in Fashion 1 unit
- FASH 2 - Presentation Techniques for Fashion 1 unit
- FASH 4 - Computer Fashion Illustration 3 units
- FASH 10 - Clothing Construction I 3 units
- FASH 15 - Beginning Fashion Illustration 2 units
- FASH 20 - Textiles 3 units
- FASH 27 - Fashion Merchandising 3 units
- FASH 28 - Visual Merchandising 2 units
- FASH 41 - Fashion Analysis and Selection 3 units
- FASH 44 - Fashion Show Production and Promotions 3 units
- FASH 95 - Cooperative Work Experience Education 2-4 units

5-6 units from:

- BUS 12 - Advertising 3 units
- BUS 14 - Marketing 3 units
- BUS 21 - Human Resources Management 3 units
- BUS 22 - Human Relations in Organizations 3 units
- BUS 27 - Effective English for Business 3 units
- FASH 35 - Applied Color Theory 2 units

Total Units: 34-35

Film/Video Production Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/finearts/filmvideo.

A Certificate of Achievement will be granted upon completion of all program requirements. A minimum of 12 units must be completed at El Camino College.

Required Core: 15 units

- FILM 110 - Film Appreciation 3 units
 - FILM 120 - Introduction to Film/Video Production 3 units
 - FILM 122 - Production I 3 units
 - FILM 124 - Production Planning 3 units
 - FILM 128 - Television Production 3 units

6 units from:

- FILM 121 - Audio Production 3 units
- FILM 232 - Production II 3 units
- FILM 234 - Camera and Lighting 3 units
- FILM 236 - Editing 3 units

Total Units: 21

Fire Academy Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/fireacademy

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Courses: 27 units

- FTEC 1 - Fire Protection Organization 3 units
- FTEC 6 - Building Construction for Fire Protection 3 units
- FTEC 15 - Fire Academy 15 units
- FTEC 144 - Emergency Medical Technician 6.5 units

Total Units: 27

Other requirements:

1. Pass a Fire Fighter Physical Agility Test (FPAT) or Candidate Physical Agility Test (CPAT) within the last 6 months as required by the California State Fire Marshal's Office.
2. Pass the El Camino College Fire Physical Qualification Test.
3. Pass a physical examination according to the National Fire Protection Association (NFPA) Standard #1582.

Fire and Emergency Technology Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/fireacademy

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Courses: 27 units

- FTEC 1 - Fire Protection Organization 3 units
- FTEC 2 - Fire Prevention Technology 3 units
- FTEC 3 - Fundamentals of Personal Fire Safety and Survival 3 units
- FTEC 5 - Fire Behavior and Combustion 3 units
- FTEC 6 - Building Construction for Fire Protection 3 units
- FTEC 10 - Hazardous Materials 3 units
- FTEC 20 - Fire Protection Equipment and Systems 3 units
- FTEC 144 - Emergency Medical Technician 6.5 units

Total Units: 27

Forensics Certificate of Achievement

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/adminjustice.

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Courses:

- AJ 111 - Criminal Investigation 3 units
- AJ 132 - Forensic Crime Scene Investigation 3 units
- AJ 133 - Fingerprint Classification and Investigation 3 units
- AJ 134 - Introduction to Crime Analysis 3 units
- AJ 135 - Report Writing 3 units
- ART 110 - Drawing Fundamentals I 3 units
- PHOT 101 - Elementary Photography 2 units

Total Units: 20

Gallery Management Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/finearts/art.

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the units required for the certificate must be completed at El Camino College.

Required Core: 15 units

- ART 129 - Fundamentals of Color 3 units
- ART 130 - Two-Dimensional Design I 3 units
- ART 141 - Digital Art Fundamentals 3 units
- ART 160 - Three-Dimensional Design 3 units
- ART 195 - Portfolio and Career Planning for Artists and Designers 3 units

6 units from:

- ART 101 - Art and Visual Culture: A Global Perspective 3 units

- ART 102A - History of Western Art - Prehistoric to Gothic 3 units
or
- ART 102AH - Honors History of Western Art - Prehistoric to Gothic 3 units

- ART 102B - History of Western Art - Proto-Renaissance to 19th Century 3 units
- ART 102C - History of Western Art - 19th Century to Contemporary Times 3 units
- ART 106 - Cross-Cultural Art 3 units
- ART 205A - History of Asian Art - India and Southeast Asia 3 units
- ART 205B - History of Asian Art - China, Korea, and Japan 3 units
- ART 207 - Art History of Mexico and Central and South America 3 units
- ART 208 - History of American Art 3 units
- ART 209 - History of African Art 3 units

2 units from:

- ART 96 - Cooperative Work Experience Education 2-4 units
- ART 99 - Independent Study 1-3 units

Total Units: 23

Heating, Ventilation, and Air Conditioning (HVAC) and Refrigeration Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/acr

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Courses:

- ACR 5 - Electrical Applications 4 units
- ACR 6 - Refrigeration and Air Conditioning Control Systems 4 units
- ACR 21 - Air Conditioning Fundamentals 4 units
- ACR 23 - Commercial Refrigeration Applications 4 units
- ACR 25 - Energy Efficient Residential, Commercial and Industrial Air Conditioning 4 units
- ACR 27 - Heating Technologies 4 units
- ACR 30 - Electric Controls 2 units
- ACR 31 - HVAC Electronics 2 units
- ACR 34 - HVAC Customer Service and Industry Certifications 1 unit
- ACR 61 - Fundamentals of Automation Systems 3 units
- ACR 62 - Energy Control and Optimization Systems 4 units
- BUS 15 - Business Mathematics 3 units

Total Units: 39

Jewelry Design and Fabrication Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/finearts/art.

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the units required for the certificate must be completed at El Camino College.

Required Core: 9 units

- ART 173 - Introduction to Jewelry and Metalsmithing 3 units
- ART 274 - Jewelry Fabrication 3 units
- ART 275 - Jewelry Casting 3 units

9 units from:

- ART 101 - Art and Visual Culture: A Global Perspective 3 units
- ART 110 - Drawing Fundamentals I 3 units
- ART 130 - Two-Dimensional Design I 3 units
- ART 141 - Digital Art Fundamentals 3 units
- ART 160 - Three-Dimensional Design 3 units
- BUS 24 - Small Business Entrepreneurship 3 units

Total Units: 18

Journalism Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/humanities/journalism.

A Certificate of Achievement will be granted upon completion of all program requirements. At least 15 units of the certificate requirements must be completed at El Camino College.

Required Courses:

- JOUR 1 - News Writing and Reporting 3 units
- JOUR 8 - Advanced Reporting and News Editing 3 units

- JOUR 6 - Basic Photojournalism 3 units
or
- PHOT 106 - Basic Photojournalism 3 units

- JOUR 9abcd - Magazine Editing and Production 3 units *
- JOUR 11abcd - Newspaper Publication 3 units *
- JOUR 12 - Mass Media and Society 3 units
- JOUR 14abcd - Multimedia Journalism 3 units *

Total Units: 21

*Note: one semester each of JOUR 9abcd, JOUR 11abcd, and JOUR 14abcd may be counted for the certificate.

Note: JOUR 6 is the same course as PHOT 106. Course credit is limited to JOUR 6 or PHOT 106.

Machinist Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/mtt.

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificates must be completed at El Camino College.

Required Courses: 28 units

- MTT 2 - Manufacturing Print Reading 3 units
- MTT 10A - Introduction to CAD/CAM 3 units
- MTT 16 - General Metals 3 units
- MTT 40 - Machine Shop Calculations 3 units
- MTT 101 - Introduction to Conventional and CNC Machining 4 units
- MTT 103 - Conventional and CNC Turning 4 units
- MTT 105 - Conventional and CNC Milling 4 units
- MTT 107 - Advanced Manufacturing Processes 4 units

Total Units: 28

Manufacturing Technology Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/manufacturingtech.

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Core: 19 units

- MTT 101 - Introduction to Conventional and CNC Machining 4 units
- MTT 10A - Introduction to CAD/CAM 3 units
or
- CADD 7 - Solid Modeling, Assemblies and Two Dimensional (2D) Drawings 3 units
- MTT 2 - Manufacturing Print Reading 3 units
or
- CADD 5 - Introduction to Mechanical Drafting 3 units
- MTT 40 - Machine Shop Calculations 3 units
- ECHT 11 - Introduction to Electronics 3 units
- WELD 15 - Basic Welding for Allied Fields 3 units

a minimum of 18 units from:

- CADD 28 - Parametric Three Dimensional (3D) Modeling and Assemblies 2 units
- CADD 31 - Orientation to CATIA 2 units
- CADD 32 - Product Modeling with CATIA 2 units
- CADD 33 - Analyses and Simulations with CATIA 2 units
- CADD 37 - Advanced CATIA Functions 2 units
- CADD 45 - Geometrical Dimensioning and Tolerancing 3 units
- ECHT 22 - Basic Electronic Fabrication 3 units
- ECHT 110 - Introduction to Direct and Alternating Current Circuits 3 units
- ECHT 120 - Semiconductor Circuits I 3 units
- ECHT 122 - Semiconductor Power Devices 3 units
- ECHT 124 - Operational Amplifiers and Linear Integrated Circuits 3 units
- ECHT 130 - Digital Systems and Computer Logic I 3 units
- ECHT 140 - Computer Systems and Hardware Technologies I 4 units
- ECHT 142 - Computer Systems and Hardware Technologies II 4 units
- ECHT 144 - CompTIA A+ Certification Preparation for Computer Hardware Systems 4 units
- ECHT 191 - Introduction to Microprocessors and Interfacing 3 units
- ETEC 10 - Principles of Engineering Technology 3 units
or
- ETEC 10A - Principles of Engineering Technology I 1.5 units
and
- ETEC 10B - Principles of Engineering Technology II 1.5 units
- ETEC 12 - Introduction to Engineering Design 3 units
or
- ETEC 12A - Introduction to Engineering Design I 1.5 units
and
- ETEC 12B - Introduction to Engineering Design II 1.5 units

- ETEC 14 - Electronics for Engineering Technologists 3 units
or
- ETEC 14A - Electronics for Engineering Technologists I 1.5 units
and
- ETEC 14B - Electronics for Engineering Technologists II 1.5 units

- ETEC 16 - Computer Integrated Manufacturing 3 units
or
- ETEC 16A - Computer Integrated Manufacturing I 1.5 units
and
- ETEC 16B - Computer Integrated Manufacturing II 1.5 units

- ETEC 18 - Engineering Design and Development 3 units
or
- ETEC 18A - Engineering Design and Development I 1.5 units
and
- ETEC 18B - Engineering Design and Development II 1.5 units

- MTT 10B - Computer Numerical Control Programming 3 units
- MTT 10J - Numerical Control Graphics Programming 3 units
- MTT 10K - 3D Numerical Control Graphics Programming 3 units
- MTT 103 - Conventional and CNC Turning 4 units
- MTT 105 - Conventional and CNC Milling 4 units
- MTT 107 - Advanced Manufacturing Processes 4 units
- MTEC 70 - Basic Robotics 2 units

- MTEC 75 - Integrated Robotic and Automated Technologies 3 units
or
- MTEC 75A - Integrated Robotic and Automated Technologies I 1.5 units
and
- MTEC 75B - Integrated Robotic and Automated Technologies II 1.5 units

- WELD 1 - Introduction to Welding Process 8 units
- WELD 5 - Basic Welding Technology 8 units
- WELD 23 - Advanced Arc Welding Specialty Lab 2 units
- WELD 40A - Introduction to Gas Tungsten Arc Welding (GTAW) 3 units
- WELD 45 - Structural Fabrication 5 units

a maximum of 4 units from:

- CADD 95 - Cooperative Work Experience Education 2-4 units
- ECHT 95 - Cooperative Work Experience Education 2-4 units
- MTT 95 - Cooperative Work Experience Education 2-4 units
- WELD 95 - Cooperative Work Experience Education 2-4 units

Total Units: 37

Marketing Certificate of Achievement

For Gainful Employment program information for the Business program options offered at El Camino College, please visit www.elcamino.edu/academics/business/marketing.

A Certificate of Achievement in Marketing will be granted upon the completion of all program requirements. A minimum of 12 units must be completed at El Camino College. Students who anticipate employment with large businesses are advised to take Business 12. Those interested in smaller enterprises should complete Business 24.

Required Courses:

- BUS 12 - Advertising 3 units
- BUS 14 - Marketing 3 units
- BUS 22 - Human Relations in Organizations 3 units
- BUS 28 - Written Business Communications 3 units
- BUS 74 - New Media Marketing 3 units

Total Units: 15

Mortgage Loan Brokerage Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/business/realstate.

A Certificate of Achievement will be granted upon completion of all program requirements. Courses must be completed with a 3.0 (B) average. A minimum of 10 units must be completed at El Camino College.

Required Core: 18-19 units

- RE 11 - Real Estate Principles 3 units
- RE 13 - Real Estate Practice 3 units
- RE 14A - Real Estate Finance I 3 units
- RE 31 - Mortgage Loan Brokering and Lending 3 units
- RE 40 - Real Estate Appraisal 3 units

- RE 16 - Real Estate Economics 3 units
or
- BUS 1A - Financial Accounting 4 units

6 units from:

- RE 12A - Legal Aspects of Real Estate 3 units
- RE 19 - Real Property Management 3 units
- RE 26 - Escrows 3 units

- RE 14B - Advanced Real Estate Finance 3 units
or
- BUS 17 - Personal Finance 3 units

3-4 units from:

- BUS 5A - Income Tax Accounting 4 units
- BUS 15 - Business Mathematics 3 units
- BUS 28 - Written Business Communications 3 units

Total Units: 27-29

Numerical Control Programmer Certificate of Achievement

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificates must be completed at El Camino College.

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/mtt.

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificates must be completed at El Camino College.

Required Courses

- MTT 2 - Manufacturing Print Reading 3 units
- MTT 10A - Introduction to CAD/CAM 3 units
- MTT 10B - Computer Numerical Control Programming 3 units
- MTT 10J - Numerical Control Graphics Programming 3 units
- MTT 10K - 3D Numerical Control Graphics Programming 3 units
- MTT 16 - General Metals 3 units
- MTT 40 - Machine Shop Calculations 3 units
- MTT 101 - Introduction to Conventional and CNC Machining 4 units
- MTT 103 - Conventional and CNC Turning 4 units
- MTT 105 - Conventional and CNC Milling 4 units

Total Units: 33

Office Applications Specialist Certificate of Achievement

For Gainful Employment program information for the Business program options offered at El Camino College, please visit www.elcamino.edu/academics/business/officeadmin.

A Certificate of Achievement will be granted upon completion of all program requirements. A minimum of 11 units must be completed at El Camino College. All units must be completed within five years of the date of issue of the certificate. Students who have questions regarding this requirement should contact the Counseling Division or Evaluations Unit for a waiver petition.

Required Courses:

- BUS 17 - Personal Finance 3 units
- BUS 27 - Effective English for Business 3 units
- BUS 29 - Oral Business Communications 3 units
- BUS 43 - Business Office Administration 3 units
- BUS 60A - Microcomputer Keyboarding I 1 unit
- BUS 60B - Microcomputer Keyboarding II and Document Processing 1 unit
- CIS 2 - Office Applications 3 units
- CIS 13 - Computer Information Systems 3 units

Total Units: 20

Paralegal Studies Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/business/paralegal.

A certificate will be awarded to those possessing an Associate, Bachelor or higher degree or who will be completing a degree concurrently with the certificate requirements. Students may earn this certificate by completing the major courses with a B average or better. Prerequisite: entrance to the program is gained by successful completion of Law 11, Introduction to Legal Research.

Required Core: 21-22 units

- PARA 1 - Introduction to Paralegal Studies 3 units
- LAW 4 - Legal Environment of Business 4 units
or
- LAW 5 - Business Law 3 units
- LAW 11 - Introduction to Legal Research 3 units
- LAW 16 - Civil Procedure 3 units
- LAW 17 - Legal Research and Writing 3 units
- LAW 19 - Introduction to Legal Technology 3 units
- LAW 20 - Paralegal Seminar 3 units

12-13 units from:

- LAW 12 - Probate Procedures 3 units
- LAW 13 - Family Law 3 units
- LAW 14 - Tort Law 3 units
- LAW 15 - Civil and Criminal Evidence 3 units
- LAW 18 - Wills, Trusts and Estate Planning 3 units
- LAW 95 - Cooperative Work Experience Education 2-4 units
- RE 12A - Legal Aspects of Real Estate 3 units

Total Units: 33-35

In-Residence Requirements

A total of 15 units of Legal Specialty courses including Law:

- LAW 11 - Introduction to Legal Research 3 units
- LAW 17 - Legal Research and Writing 3 units
- LAW 20 - Paralegal Seminar 3 units

And six additional units selected from:

- LAW 12 - Probate Procedures 3 units
- LAW 13 - Family Law 3 units
- LAW 14 - Tort Law 3 units
- LAW 15 - Civil and Criminal Evidence 3 units
- LAW 16 - Civil Procedure 3 units
- LAW 18 - Wills, Trusts and Estate Planning 3 units
- LAW 19 - Introduction to Legal Technology 3 units

must be taken at El Camino College for the certificate.

Paramedical Technician Certificate of Achievement

In order to be eligible for the Paramedical Technician certificate, the student must first complete the following requirements:

1. Provide verification of Emergency Medical Technician-1 (EMT-1) certification within the last 12 months
2. Provide verification of at least 6 months experience as an EMT-1 in a pre-hospital setting
3. Complete Fire and Emergency Technology 15 or equivalent
4. Pass a medical examination according to the National Fire Protection Association (NFPA) Standard #1582
5. Furnish proof of rubella immunity, Tuberculosis (TB) test and Hepatitis B vaccine

In addition to the program prerequisites, it is recommended that students be eligible, through assessment or coursework, for ENGL 1A and MATH 80.

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/fireacademy

Required Courses (after meeting above requirements):

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Courses: 33 units

- FTEC 130 - Basic Prehospital Care Principles 2 units
- FTEC 131 - Field Assessing and Reporting 1.5 units
- FTEC 132 - Prehospital Care Pharmacology 1.5 units
- FTEC 133 - Basic and Advanced Life Support 6.5 units
- FTEC 134 - Medical Emergencies 4 units
- FTEC 135 - Traumatic Emergencies 2 units
- FTEC 136 - Special Patient Emergencies 2 units
- FTEC 137 - Emergency Medical Services (EMS)/Legal Aspects/Documentation 2 units
- FTEC 138 - Paramedic Clinical Internship 3 units
- FTEC 139 - Paramedic Field Internship 8.5 units

Total Units: 33

Recommended Electives:

ANAT 30 and any college chemistry course with a laboratory

Photography Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/finearts/photo.

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Core: 17-18 units

- PHOT 101 - Elementary Photography 2 units
or
- PHOT 106 - Basic Photojournalism 3 units
or
- JOUR 6 - Basic Photojournalism 3 units

- PHOT 102 - Basic Photography 3 units
- PHOT 202 - Intermediate Photography 4 units
- PHOT 203 - Advanced Photography 4 units
- PHOT 223A - Theory of Color/Color Printing 4 units

9 units from:

- FILM 234 - Camera and Lighting 3 units
- PHOT 204 - Portraiture 3 units

- PHOT 206ab - Advanced Photojournalism 2 units *
or
- JOUR 7ab - Advanced Photojournalism 2 units *

- PHOT 223B - Intermediate Color Photography/Printing 4 units
- PHOT 254 - Intermediate 35mm Black and White Photography 2 units
- PHOT 257 - Creative Photographic Processes 2 units

Total Units: 26-27

Note: PHOT 106 is the same course as JOUR 6.

Course credit is limited to PHOT 106 or JOUR 6.

*Note: one semester of PHOT 206ab or JOUR 7ab may be counted for the major.

Real Estate Appraisal Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/business/realestate.

A Certificate of Achievement will be awarded only to those possessing an associate or higher degree or who will complete degree concurrently with the certificate requirements.

Required Core: 15 units

- RE 11 - Real Estate Principles 3 units
- RE 14A - Real Estate Finance I 3 units
- RE 16 - Real Estate Economics 3 units
- RE 40 - Real Estate Appraisal 3 units
- RE 41 - Advanced Real Estate Appraisal 3 units

6 units from:

- RE 14B - Advanced Real Estate Finance 3 units
- RE 19 - Real Property Management 3 units
- RE 21 - Real Estate Investments 3 units
- RE 31 - Mortgage Loan Brokering and Lending 3 units

6 units from:

- ARCH 150A - Construction Documentation I 3 units
- BUS 15 - Business Mathematics 3 units
- BUS 28 - Written Business Communications 3 units
- CIS 13 - Computer Information Systems 3 units

Total Units: 27

Real Estate Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/business/realestate.

A Certificate of Achievement will be granted upon completion of all program requirements. Courses must be completed with a 3.0 (B) average. A minimum of 10 units must be completed at El Camino College.

Required Core: 18-19 units

- RE 11 - Real Estate Principles 3 units
- RE 12A - Legal Aspects of Real Estate 3 units
- RE 13 - Real Estate Practice 3 units
- RE 14A - Real Estate Finance I 3 units
- RE 40 - Real Estate Appraisal 3 units

- RE 16 - Real Estate Economics 3 units
or
- BUS 1A - Financial Accounting 4 units

6 units from:

- LAW 5 - Business Law 3 units
- RE 14B - Advanced Real Estate Finance 3 units
- RE 19 - Real Property Management 3 units
- RE 21 - Real Estate Investments 3 units
- RE 26 - Escrows 3 units
- RE 31 - Mortgage Loan Brokering and Lending 3 units
- RE 41 - Advanced Real Estate Appraisal 3 units

Total Units: 24-25

Refrigeration Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/acr

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Courses:

- ACR 6 - Refrigeration and Air Conditioning Control Systems 4 units
- ACR 21 - Air Conditioning Fundamentals 4 units
- ACR 23 - Commercial Refrigeration Applications 4 units
- ACR 34 - HVAC Customer Service and Industry Certifications 1 unit

Total Units: 13

Respiratory Care Certificate of Achievement

General Information

Students without previous medical training are strongly advised to complete RC 170. Students must complete all other non-respiratory coursework required for the Associate in Science degree in respiratory care. The program has three phases that require specific courses and sequence.

For more program and admission information, go to www.elcamino.edu/academics/healthsciences/respiratorycare.

Preclinical Phase

In the pre-clinical phase of the program, the student takes all the non-clinical Respiratory Care courses, which may include RC 170. The student shall also complete, at a minimum, RC 172 and RC 174, ANAT 30, CIS 13, ENGL 1A and the associate's degree mathematics competency. In addition, due to the rigorous schedule in the clinical phase, it is recommended the student complete all the other general education and science courses required for the Associate in Science degree. For example, Psychology, Humanities, as well as Health and Physical Education courses or equivalent. (See academic counselor for specific coursework required for the associate degree in Respiratory Care.)

Admission to the Clinical Phase

Admission to the clinical phase of the program is limited by clinical space and budget considerations. In order to gain admittance to the clinical phase of the program, the student must complete the preclinical phase with a minimum grade of C in all courses. The student must also submit a program application and completed physical exam form with the required lab tests and readiness for clinical duties certified by an appropriate health care professional. Students may submit completed applications and physical exam forms when all the required preclinical coursework is completed. Applications are accepted by the program director up to the last day of the spring semester and students are assigned seats in the next clinical class based on verification of all required coursework, available space, qualifications, and academic merit. A new clinical class starts in the summer session each year.

Initial-Clinical Associate Degree Phase

In this clinical phase of the program, the student takes all the combined Respiratory Care science classroom and clinical courses required to receive the Respiratory Care program degree which, at a minimum, includes RC 176, RC 178, RC 280, RC 282, RC 286, 288, 289, 290, RC 294, RC 295, 298. In addition, the student must complete all other courses required for the Associate in Science degree in respiratory care if they have not been completed in the preclinical phase. This phase always starts with the admission to RC 176 in the summer session of any given year.

Final-Clinical Certificate of Achievement Phase

Two semesters of additional classroom/clinical advanced coursework are required to complete the requirements for the associate degree and the certificate of achievement from the advanced registry-level Respiratory Care program. The courses in this phase are RC 284, 291, RC 292, RC 293, 296, 297. This phase follows the associate degree phase and ends at the end of the spring semester, two years after admission to RC 176, ending with the awarding of the associate degree and certificate of achievement from the advanced respiratory care program.

Program Costs

In addition to tuition fees charged by the college, it is estimated that the cost of books, lab costs, stethoscopes and miscellaneous supplies is approximately \$3,500 over a two-year period. Financial assistance is available to students who meet the eligibility requirements.

Admission Requirements and Length of Program

For the high school graduate with a C average or better in science and math, the program will take at least 2 1/2 years to complete, including all prerequisites. A student is formally accepted into the clinical phase of the program after satisfactory completion of prerequisites, general education courses, and introductory respiratory care science courses.

Procedure for Admission

The student should apply for a reservation to register at El Camino College. An appointment with a Health Science counselor should be made so that the matriculation process can be completed. Students wishing to take advanced college work after graduation may choose a specific general education track. All respiratory care science and clinical courses must be taken and completed with at least a C or better.

For more program and admission information, go to www.elcamino.edu/academics/healthsciences/respiratorycare.

For Gainful Employment program information, please visit www.elcamino.edu/academics/healthsciences/respiratorycare.

To be eligible for the Certificate of Achievement, the student must have an Associate in Science degree in Respiratory Care from El Camino College. A Certificate of Achievement will be granted upon completion of the following course requirements.

Required Core: 26 units

- RC 284 - Respiratory Care of the Critically Ill Patient III 9 units
- RC 291 - Advanced Specialty Ventilators and Specialized Oxygen Delivery Devices 3 units
- RC 292 - Advanced Clinical Application and Interpretation of Blood Gases 2 units

- RC 293 - Cardiac Monitoring in Advanced Respiratory Care 4 units
- RC 296 - Physical Examination in Advanced Respiratory Care 4 units
- RC 297 - Perinatal and Pediatric Care in Advanced Respiratory Care 4 units

Total Units: 26

Retail Management Certificate of Achievement

For Gainful Employment program information for the Business program options offered at El Camino College, please visit www.elcamino.edu/academics/business/businessmgmt.

A Certificate of Achievement in Retail Management will be granted upon completion of all program requirements. A minimum of 12 units must be completed at El Camino College.

Required Courses:

- BUS 1A - Financial Accounting 4 units
or
- BUS 11 - Accounting for Small Business 3 units

- BUS 14 - Marketing 3 units
- BUS 19 - Principles of Retailing Management 3 units
- BUS 20 - Business Management 3 units
- BUS 21 - Human Resources Management 3 units
- BUS 22 - Human Relations in Organizations 3 units
- BUS 29 - Oral Business Communications 3 units
- CIS 2 - Office Applications 3 units

Total Units: 24-25

Sign Language/Interpreter Training Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/src/signlang.asp.

A Certificate of Achievement will be granted upon completion of the program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Core: 36 units

- SLAN 113 - American Sign Language III 4 units
- SLAN 114 - American Sign Language IV 4 units
- SLAN 115 - American Sign Language V 4 units
- SLAN 120 - Fingerspelling and Numerical Concepts 1 unit
- SLAN 130 - Deaf Culture 3 units
- SLAN 210 - American Sign Language to English Interpreting I 2 units
- SLAN 211 - English to American Sign Language Interpreting I 2 units
- SLAN 220 - American Sign Language to English Interpreting II 2 units
- SLAN 221 - English to American Sign Language Interpreting II 2 units
- SLAN 230 - Sign Language Interpreting III 2 units
- ENGL 1A - Reading and Composition 4 units

3 units from:

- ANTH 4 - Language and Culture 3 units
- CDEV 150 - Introduction to Children with Special Needs 3 units
- COMS 100 - Public Speaking 3 units
- THEA 113 - Introduction to Acting 3 units

Total Units: 39

Special Education Assistant Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/behavioralsocial/childhooded/index.asp.

A Certificate of Achievement will be granted upon completion of all program requirements. A minimum of 12 units must be completed at El Camino College.

Required Core 18 units

- CDEV 103 - Child Growth and Development 3 units
- CDEV 104 - The Home, The School, The Community 3 units
- CDEV 110 - Child Health, Safety, and Nutrition 3 units
- CDEV 150 - Introduction to Children with Special Needs 3 units

- CDEV 152 - Curriculum and Strategies for Children with Special Needs 3 units
or
- CDEV 165 - Autism, ADHD, Physical and Health Impairments 3 units

- CDEV 169 - Special Education Practicum 3 units

3 units from:

- CDEV 115 - Introduction to Curriculum 3 units
- CDEV 116 - Creative Art for Young Children 3 units
- CDEV 117 - Music and Movement for Young Children 3 units
- CDEV 118 - Science and Math for Young Children 3 units
- CDEV 119 - Language Arts for Young Children 3 units

6 units from:

- CDEV 108 - Principles and Practices of Teaching Young Children 3 units
- CDEV 112 - Teaching Young Children in a Diverse Society 3 units
- CDEV 114 - Observing and Assessing Young Children 3 units
- CDEV 152 - Curriculum and Strategies for Children with Special Needs 3 units
- CDEV 165 - Autism, ADHD, Physical and Health Impairments 3 units
- NFOO 15 - Nutrition for Infants and Young Children 3 units
- SLAN 111 - American Sign Language I 4 units

Total Units: 27

Note: Proof of a valid Pediatric CPR and First Aid Certification and immunizations may be required for employment.

Note: Courses may not be counted in more than one category.

The State Department of Social Services will qualify a person as a preschool teacher if the student has at least 12 units in Early Childhood Education. These units must include CDEV 103, CDEV 104 and one course from CDEV 116, CDEV 117, CDEV 118 or CDEV 119. Preschool directors must complete 9 additional units in Program Administration (CDEV 129, CDEV 130, and CDEV 131).

Transfer Studies Certificate of Achievement

Behavioral and Social Sciences Division

www.elcamino.edu/academics/behavioralsocial

The transfer studies certificate provides students with the opportunity to explore diverse methods of inquiry through course work required for fulfilling California State University General Education Breadth requirements or the Intersegmental General Education Transfer Curriculum (IGETC). Students will develop critical thinking skills, learn to communicate effectively in writing, and acquire an understanding of major concepts, issues, and diverse viewpoints. Through course options, students will use mathematical concepts to solve problems, employ methods of scientific inquiry to understand the world around them, and investigate the arts, humanities and social and behavioral sciences.

Certificates of Achievement CSU General Education-Breadth:

A Certificate of Achievement will be granted to students who complete a minimum of 39 units from category A through E of the CSU general education requirements.

Note: To receive full certification of the CSU general education pattern, a grade of C or better is required in areas A and B4. Certification means that El Camino College students have completed the lower division general education requirements for the CSU. Students must request certification in the Admissions Office.

Note: Completion of CSU General Education Breadth requirements alone is not enough to make students eligible for admission to a CSU. Please consult with a counselor for details on completing transfer admission requirements.

Total Units: 39

Intersegmental General Education Transfer Curriculum (IGETC):

A Certificate of Achievement will be granted to students who complete a minimum of 34 units to fulfill the IGETC pattern requirements.

Note: To receive full certification of the IGETC pattern, a grade of C or better is required in each course. Certification means that El Camino College has verified that students have completed the lower division general education requirements for IGETC. Students must request certification in the Admissions Office.

Note: Completion of the IGETC requirements alone is not enough to make students eligible for admission to a CSU or UC. Please consult with a counselor for details for completing transfer admission requirements.

Total Units: 34

Visual Communications Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/finearts/art.

A Certificate of Achievement in Visual Communications will be granted upon completion of all program requirements. A minimum of 12 units required for the certificate must be completed at El Camino College.

Required Core: 18 units

- ART 130 - Two-Dimensional Design I 3 units
- ART 131 - Lettering and Typography I 3 units
- ART 132 - Advertising Design I 3 units
- ART 133 - Graphic Design 3 units
- ART 141 - Digital Art Fundamentals 3 units
- ART 146 - Designing for the World Wide Web 3 units

3 units from:

- ART 143 - Digital Publishing Fundamentals 3 units
- ART 145 - Web Animation and Games 3 units
- ART 231 - Lettering and Typography II 3 units
- ART 232 - Advertising Design II 3 units
- ART 233 - Graphic Design II 3 units

3-4 units from:

- BUS 12 - Advertising 3 units
- BUS 14 - Marketing 3 units
- BUS 24 - Small Business Entrepreneurship 3 units
- CIS 30 - Introduction to eCommerce 3 units
- CIS 133 - Mashup JavaScript, jQuery and AJAX 4 units
- CIS 136 - Building Mobile Apps 3 units
- COMS 100 - Public Speaking 3 units

2-3 units from:

- ART 129 - Fundamentals of Color 3 units
- ART 142 - Digital Imaging Fundamentals 3 units
- ART 147 - Motion Graphics 3 units
- ART 153 - Illustration I 3 units

- JOUR 6 - Basic Photojournalism 3 units
or
- PHOT 106 - Basic Photojournalism 3 units

6-7 units from capstone courses:

- ART 96 - Cooperative Work Experience Education 2-4 units
- ART 99 - Independent Study 1-3 units
- ART 195 - Portfolio and Career Planning for Artists and Designers 3 units

Total Units: 33-35

Note: Students may select one 3 unit course from the above lists of electives to complete required capstone units. Recommended Preparation: ART 110.

Welding Certificate of Achievement

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/welding/.

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Core: 13-14 units

- WELD 1A - Introduction to Multi-Process Welding 4 units
- WELD 1B - Advanced Welding for Manufacturing 4 units
- WELD 10A - Introduction to Shielded Metal Arc Welding (SMAW) 4 units
- WELD 10B - Intermediate Shielded Metal Arc Welding (SMAW) 4 units
- WELD 10C - Advanced Certification and Career Preparation Lab 2 units
- WELD 29 - Blueprint Reading 3 units
- WELD 40A - Introduction to Gas Tungsten Arc Welding (GTAW) 3 units

8 units from:

- WELD 28 - American Welding Society (AWS) D1.1 Certification Test Preparation 3 units
- WELD 40B - Intermediate Gas Tungsten Arc Welding (GTAW) 3 units
- WELD 45 - Structural Fabrication 5 units

5-6 units from:

- WELD 15 - Basic Welding for Allied Fields 3 units
- WELD 20A - Flux Core and Gas Metal Arc Welding 4 units
- WELD 23 - Advanced Arc Welding Specialty Lab 2 units
- WELD 40C - Advanced Gas Tungsten Arc Welding (GTAW) Skills Lab 2 units

Total Units: 26-28

Administration of Justice: Homeland Security Essentials Certificate of Accomplishment

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/adminjustice.

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the requirements for the certificate must be completed at El Camino College.

Required Courses:

- AJ 10 - Introduction to Homeland Security 3 units
- AJ 11 - Intelligence and Security Management 3 units
- AJ 12 - Transportation and Border Security Management 3 units

Total Units: 9

Air Conditioning and Refrigeration: Automation Fundamentals Certificate of Accomplishment

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/acr

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Courses:

- ACR 61 - Fundamentals of Automation Systems 3 units
- ACR 62 - Energy Control and Optimization Systems 4 units

Total Units: 7

Air Conditioning and Refrigeration: Energy Efficiency Certificate of Accomplishment

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/acr

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Courses:

- ACR 21 - Air Conditioning Fundamentals 4 units
- ACR 25 - Energy Efficient Residential, Commercial and Industrial Air Conditioning 4 units
- ACR 27 - Heating Technologies 4 units
- ACR 30 - Electric Controls 2 units

Total Units: 14

Air Conditioning and Refrigeration: Heating Technologies Certificate of Accomplishment

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/acr

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Courses:

- ACR 21 - Air Conditioning Fundamentals 4 units
- ACR 27 - Heating Technologies 4 units

Total Units: 8

Air Conditioning and Refrigeration: HVACR Electrical Fundamentals Certificate of Accomplishment

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/acr

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Courses:

- ACR 5 - Electrical Applications 4 units
- ACR 6 - Refrigeration and Air Conditioning Control Systems 4 units
- ACR 30 - Electric Controls 2 units

Total Units: 10

Air Conditioning and Refrigeration: HVACR Fundamentals Certificate of Accomplishment

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/acr

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Courses:

- ACR 21 - Air Conditioning Fundamentals 4 units
- ACR 34 - HVAC Customer Service and Industry Certifications 1 unit

Total Units: 5

Air Conditioning and Refrigeration: Refrigeration Fundamentals Certificate of Accomplishment

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/acr

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Courses:

- ACR 21 - Air Conditioning Fundamentals 4 units
- ACR 23 - Commercial Refrigeration Applications 4 units

Total Units: 8

AutoCAD Mechanical Drafting Trainee Certificate of Accomplishment

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/cadd/.

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Courses: 6 units

- CADD 5 - Introduction to Mechanical Drafting 3 units
- CADD 7 - Solid Modeling, Assemblies and Two Dimensional (2D) Drawings 3 units

Total Units: 6

Automotive Accident Reconstruction Certificate of Accomplishment

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/autocollision.

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the requirements for the certificate must be completed at El Camino College.

Required Core:

- ACRP 24 - Automotive Collision Analysis 3 units
- ACRP 26 - Automotive Accident Reconstruction 3 units

Total Units: 6

Automotive Air Conditioning Technician Certificate of Accomplishment

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/autotech.

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Courses: 3 units

- ATEC 81 - Automotive Air Conditioning 3 units

Total Units: 3

Automotive Brakes and Suspension Technician Certificate of Accomplishment

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/autotech.

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

8 units from:

- ATEC 11 - Brakes, Suspension and Four Wheel Alignment 8 units
- ATEC 14 - Brakes 4 units
- ATEC 16 - Suspension and Four Wheel Alignment 4 units

Total Units: 8

Automotive Collision Investigation Certificate of Accomplishment

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/autocollision.

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the requirements for the certificate must be completed at El Camino College.

Required Courses: 6 units

- ACRP 20 - Automotive Collision Investigation 3 units
- ACRP 22 - Automotive Repair Fraud 3 units

Total Units: 6

Automotive Collision Repair/Painting: Damage Estimating Certificate of Accomplishment

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/autocollision.

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the requirements for the certificate must be completed at El Camino College Automotive Collision Investigation Certificate of Accomplishment

Required Core:

- ACRP 20 - Automotive Collision Investigation 3 units
- ACRP 22 - Automotive Repair Fraud 3 units

Total Units: 6

Automotive Collision Repair/Painting: Damage Estimating Certificate of Accomplishment

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/autocollision.

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the requirements for the certificate must be completed at El Camino College Automotive Collision Investigation Certificate of Accomplishment

Required Core:

- ACRP 3A - Introduction to Automotive Collision Estimating 3 units
- ACRP 3B - Computerized Collision Damage Estimating 3 units

Total Units: 6

Automotive Engine Management Certificate of Accomplishment

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/autotech.

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

- ATEC 21 - Introduction to Engine Performance 2 units

8 units from:

- ATEC 22A - Introduction to Engine Performance, Electrical and Fuel Systems 8 units
- ATEC 23 - Engine Performance, Electrical and Fuel Systems 4 units
- ATEC 24 - Computer Controlled Engine Management, Fuel Systems and Emissions 4 units

Automotive Engine Rebuilding/Repair Technician Certificate of Accomplishment

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/autotech.

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

8 units from:

- ATEC 41 - Engine Rebuilding 8 units
- ATEC 42 - Engine Repair 8 units
- ATEC 43 - Introduction to Engine Repair 4 units
- ATEC 45 - Automotive Machining 4 units

Total Units: 8

Automotive Transmission and Drive Train Technician Certificate of Accomplishment

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/autotech.

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

8 units from:

- ATEC 33 - Transmissions, Drive Train and Drive Axles 8 units
- ATEC 34 - Automatic Transmissions 4 units
- ATEC 35 - Manual Transmission, Drive Train and Drive Axles 4 units

Total Units: 8

Business Fundamentals Certificate of Accomplishment

A Certificate of Accomplishment will be granted upon completion of all program requirements. A minimum of 3 units must be completed at El Camino College.

Required Courses:

- BUS 20 - Business Management 3 units
- BUS 22 - Human Relations in Organizations 3 units
- BUS 29 - Oral Business Communications 3 units
- CIS 13 - Computer Information Systems 3 units

Total Units: 12

Cabinet and Millwork Certificate of Accomplishment

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/constructiontech.

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Core: 8 units

- CTEC 200 - General Cabinet Making 2 units
- CTEC 201 - Upper Residential Cabinets 2 units
- CTEC 202 - Base Residential Cabinets 2 units
- CTEC 203 - Dedicated Use Cabinets 2 units

2.5 units from:

- CTEC 220 - Hinging Systems and Doors 2.5 units
- CTEC 221 - Drawer Systems 2.5 units

Total Units: 10.5

Cloud Computing with Amazon Web Services Certificate of Accomplishment

Required Courses:

- CIS 150 - Cloud Computing with AWS 3 units
- CIS 152 - Data Storage with AWS 3 units
- CIS 154 - Compute Engines with AWS 3 units
- CIS 156 - Security with AWS 3 units

Total Units: 12

CompTIA Computer Hardware Technician Certificate of Accomplishment

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/electronics.

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Courses: 12 units

- ECHT 144 - CompTIA A+ Certification Preparation for Computer Hardware Systems 4 units
- ECHT 146 - CompTIA Network+ Certification Preparation for Computer Hardware Systems 4 units
- ECHT 148 - CompTIA Security+ Certification Preparation for Computer Hardware Systems 4 units

Total Units: 12

Computer Hardware Technician Certificate of Accomplishment

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/electronics.

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Courses: 15 units

- ECHT 11 - Introduction to Electronics 3 units
- ECHT 140 - Computer Systems and Hardware Technologies I 4 units
- ECHT 142 - Computer Systems and Hardware Technologies II 4 units
- ECHT 144 - CompTIA A+ Certification Preparation for Computer Hardware Systems 4 units

Total Units: 15

Cosmetology Level I Certificate of Accomplishment

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/cosmetology.

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College. Completion of at least 500 hours are required.

13 units from:

- COSM 1 - Introduction to Cosmetology Procedures 13 units
or
- COSM 10 - Introduction to Cosmetology I 6.5 units
- COSM 11 - Introduction to Cosmetology II 6.5 units

Total Units: 13

Creative Writing Certificate of Accomplishment

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 15 units of the certificate must be completed at El Camino College.

9 units from:

- ENGL 23A - Introduction to Creative Nonfiction 3 units
- ENGL 24A - Creative Writing: Introduction to Poetry 3 units
- ENGL 25A - Creative Writing: Introduction to the Craft of Fiction 3 units
- ENGL 78 - Creative Writing: Screenwriting 3 units

3 units from:

- ENGL 24B - Creative Writing: A Workshop in Poetry 3 units
- ENGL 25B - Creative Writing: A Workshop in Fiction and Nonfiction 3 units

3 units from:

- ENGL 12 - Introduction to Fiction 3 units
- ENGL 15 - A Survey of British Literature I 3 units
- ENGL 15B - Survey of British Literature II 3 units
- ENGL 20 - Shakespeare's Plays - Tragedies and Romances 3 units
- ENGL 21 - Shakespeare's Plays - Comedies and Histories 3 units
- ENGL 22 - Suspense Literature 3 units
- ENGL 27 - Children's Literature 3 units
- ENGL 28 - Images of Women in Literature 3 units
- ENGL 30 - The English Bible as Literature 3 units
- ENGL 31 - Mythology and Folklore 3 units
- ENGL 34 - The Short Story 3 units
- ENGL 35 - World Literature: 3500 BCE to 1650 CE 3 units
- ENGL 36 - World Literature: 1650 CE to Present 3 units
- ENGL 39 - Literature and Film 3 units
- ENGL 40A - American Literature I 3 units
- ENGL 40B - American Literature II 3 units
- ENGL 42 - Chicano and Latino Literature 3 units
- ENGL 43 - African American Literature 3 units
- ENGL 44 - The Literature of American Ethnic Groups 3 units
- ENGL 48 - Modern Literature of Latin America 3 units
- ENGL 98 - College Literary Magazine Editing and Publishing 3 units
- HUMA 1 - An Introduction to the Humanities 3 units
- JOUR 9abcd - Magazine Editing and Production 3 units
- THEA 104 - Dramatic Literature 3 units

Total Units: 15

Electronics Technician Certificate of Accomplishment

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/electronics.

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Courses: 16 units

- ECHT 11 - Introduction to Electronics 3 units
- ECHT 22 - Basic Electronic Fabrication 3 units
- ECHT 110 - Introduction to Direct and Alternating Current Circuits 3 units
- ECHT 120 - Semiconductor Circuits I 3 units
- ECHT 140 - Computer Systems and Hardware Technologies I 4 units

Total Units: 16

Engineering Technology: Electrical and Electronics Engineering Technician Certificate of Accomplishment

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/engineeringtec.

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Courses: 12 units

- ETEC 10 - Principles of Engineering Technology 3 units
or
- ETEC 10A - Principles of Engineering Technology I 1.5 units
and
- ETEC 10B - Principles of Engineering Technology II 1.5 units

- ETEC 12 - Introduction to Engineering Design 3 units
or
- ETEC 12A - Introduction to Engineering Design I 1.5 units
and
- ETEC 12B - Introduction to Engineering Design II 1.5 units

- ETEC 14 - Electronics for Engineering Technologists 3 units
or
- ETEC 14A - Electronics for Engineering Technologists I 1.5 units
and
- ETEC 14B - Electronics for Engineering Technologists II 1.5 units

- CADD 5 - Introduction to Mechanical Drafting 3 units

2 - 3 unit from:

- ECHT 22 - Basic Electronic Fabrication 3 units
- ECHT 95 - Cooperative Work Experience Education 2-4 units

Total Units: 14-15

Engineering Technology: Mechanical Engineering Design Technician Certificate of Accomplishment

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/engineeringtec.

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Courses: 9 units

- ETEC 10 - Principles of Engineering Technology 3 units
or
- ETEC 10A - Principles of Engineering Technology I 1.5 units
and
- ETEC 10B - Principles of Engineering Technology II 1.5 units

- ETEC 12 - Introduction to Engineering Design 3 units
or
- ETEC 12A - Introduction to Engineering Design I 1.5 units
and
- ETEC 12B - Introduction to Engineering Design II 1.5 units

- ETEC 18 - Engineering Design and Development 3 units
or
- ETEC 18A - Engineering Design and Development I 1.5 units
and
- ETEC 18B - Engineering Design and Development II 1.5 units

3 - 4 unit from:

- CADD 5 - Introduction to Mechanical Drafting 3 units
- ETEC 14 - Electronics for Engineering Technologists 3 units
- ETEC 14A - Electronics for Engineering Technologists I 1.5 units
- ETEC 14B - Electronics for Engineering Technologists II 1.5 units
- ETEC 15 - Aerospace Engineering 3 units
- ETEC 15A - Aerospace Engineering I 1.5 units
- ETEC 16 - Computer Integrated Manufacturing 3 units
- ETEC 16A - Computer Integrated Manufacturing I 1.5 units
- ETEC 16B - Computer Integrated Manufacturing II 1.5 units
- MTT 101 - Introduction to Conventional and CNC Machining 4 units
- WELD 15 - Basic Welding for Allied Fields 3 units

Total Units: 12-13

English as a Second Language Certificate of Accomplishment

Humanities Division

www.elcamino.edu/academics/humanities

The English as a Second Language program prepares students for college-level English courses and employment in English-speaking environments. By completing the certificate requirements, the student will gain proficiency in reading, writing, speaking, and understanding American English. Competency will be assessed by the student successfully meeting all the outcomes in the courses required by the certificate.

Required Courses:

- ESL 51C - Advanced Listening, Speaking and Pronunciation 4 units
- ESL 52C - Advanced Reading 4 units
- ESL 53C - Advanced Essay Writing and Grammar 4 units

Total Units: 12

Environmental Technology Certificate of Accomplishment

Industry and Technology Division

www.elcamino.edu/academics/indtech

The environmental technology program prepares students for employment in the sustainable technology field. Students gain understanding of the broad range of ecological and social issues driving sustainability, as well as a global awareness of environmentalism. With a foundation in the principles of sustainability, students develop a framework of understanding with specific training in environmental systems, sustainable materials, and technical methodologies. Areas such as distribution and energy management, water resources, and waste management will be studied. Students completing the program will be positioned for sustainable jobs in architecture, construction and building energy auditing, heating, ventilation and air conditioning, fashion, automotive technology, and related industries. Competencies will be assessed regularly by student performance in the classroom and laboratory.

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Core: 9 units

- ET 101 - Theory and Relevancy of Global Environmental Awareness 3 units
- ET 102 - Sustainable Energy and Renewable Building Sciences and Technologies 3 units
- ET 103 - Environmental Technology Materials and Methodologies 3 units

4-8 units from:

- ACR 20 - Solar Energy Applications - Photovoltaics and Solar Thermal 3 units
- ACR 25 - Energy Efficient Residential, Commercial and Industrial Air Conditioning 4 units
- ARCH 100 - An Orientation to Architecture 1 unit
- ET 165 - Sustainable and Regenerative Practices in Site and Landscape Development 3 units
- CTEC 100 - Building Fundamentals 4 units
- CTEC 110 - Additions and Remodeling 4 units
- FASH 20 - Textiles 3 units

Total Units: 13-17

Euro Hardware Certificate of Accomplishment

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/constructiontech.

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Core: 5 units

- CTEC 220 - Hinging Systems and Doors 2.5 units
- CTEC 221 - Drawer Systems 2.5 units

2 units from:

- CTEC 200 - General Cabinet Making 2 units
- CTEC 201 - Upper Residential Cabinets 2 units
- CTEC 202 - Base Residential Cabinets 2 units
- CTEC 203 - Dedicated Use Cabinets 2 units

1.5 units from:

- CTEC 210 - Furniture Making Laboratory - Interpreting Commercial Plans 1.5 units
- CTEC 211 - Furniture Making Laboratory - Plan Modifications 1.5 units
- CTEC 212 - Furniture Making Laboratory - Developing Original Plans 1.5 units
- CTEC 213 - Furniture Making Laboratory - Building without Plans 1.5 units

Total Units: 8.5

Fire Explorer Certificate of Accomplishment

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/fireacademy

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Courses: 12 units

- FTEC 1 - Fire Protection Organization 3 units
- FTEC 6 - Building Construction for Fire Protection 3 units
- FTEC 144 - Emergency Medical Technician 6.5 units

Total Units: 12

Fitness Trainer Certificate of Accomplishment

A Certificate of Accomplishment will be granted upon completion of all program requirements.

Required Courses:

- FAID 1 - First Aid, Cardiopulmonary Resuscitation (CPR) and Basic Emergency Care 3 units
- PE 10 - Body Conditioning and Physical Fitness 1 unit
- PE 277 - Introduction to Kinesiology 3 units
- PE 280 - Exercise and Nutrition Programs for Fitness and Weight Management 3 units
- PE 290 - Personal Fitness Trainer 3 units

Total Units: 13

Furniture Design and Fabrication Certificate of Accomplishment

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/constructiontech.

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Core: 6 units

- CTEC 210 - Furniture Making Laboratory - Interpreting Commercial Plans 1.5 units
- CTEC 211 - Furniture Making Laboratory - Plan Modifications 1.5 units
- CTEC 212 - Furniture Making Laboratory - Developing Original Plans 1.5 units
- CTEC 213 - Furniture Making Laboratory - Building without Plans 1.5 units

2.5 units from:

- CTEC 220 - Hinging Systems and Doors 2.5 units
- CTEC 221 - Drawer Systems 2.5 units

Total Units: 8.5

Gas Tungsten Arc Welding (GTAW) Ferrous and Non-Ferrous Certificate of Accomplishment

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/welding/.

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Courses: 14 units

- WELD 15 - Basic Welding for Allied Fields 3 units
- WELD 29 - Blueprint Reading 3 units
- WELD 40A - Introduction to Gas Tungsten Arc Welding (GTAW) 3 units
- WELD 40B - Intermediate Gas Tungsten Arc Welding (GTAW) 3 units
- WELD 40C - Advanced Gas Tungsten Arc Welding (GTAW) Skills Lab 2 units

Total Units: 14

Hybrid, Electric and Alternative Fuels Certificate of Accomplishment

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/autotech/.

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

- ATEC 51 - Introduction to Alternative Fuel Vehicles 2 units
- ATEC 52 - Introduction to Hybrid, Electric and Fuel-Cell Vehicle Technology 3 units
- ATEC 53 - Hybrid, Fuel-Cell and Electric Vehicle Diagnosis & Repair 3 units

Total Units: 8

Radiologic Technology Certificate of Accomplishment Licensure

Students who complete all Radiologic Technology Associate in Science degree and Certificate of Accomplishment requirements are eligible to take the licensing examination administered by the American Registry of Radiologic Technologists (ARRT) to become a registered Radiologic Technologist (R.T.). Upon completion of the ARRT exam, students are eligible to apply for the State of California, Department of Health Public Services, Radiation Health Branch, Certified Radiologic Technologist (C.R.T.) licensure and the Fluoroscopy examination and licensure (C.R.T.), (R.F.).

Program Readmission and Course Repetition

Students who leave the Radiologic Technology program for any reason (self or faculty initiated) are eligible to be readmitted to the program subject to availability of space. Radiologic Technology courses in which a student has received a D or F grade may be repeated one time and the student may only re-enter the program one time. The JRCERT requires that all students complete the program within three years of their original admission date. This policy is available for review in the Program Director's Office and is published in the Student Handbook Student academic standing at the time of leaving the program will determine whether academic support courses will be prescribed before re-entry. Students must comply with all conditions of acceptance for re-entry, including submission of a self-evaluation and filing a new application before the student may return. The application points will also be considered when ranking the returning students. The student may be asked to repeat courses previously passed within the program for successful continuance in the program.

Advanced Standing

The student with prior training or experience may petition for credit by examination for RTEC 111 and RTEC 123.

Prospective students who have had prior education in an accredited Radiologic Technology program may request consideration for entry into the Radiologic Technology Program with advanced placement if space permits. Foreign graduates must have their transcripts evaluated and meet with a college counselor for matriculation prior to meeting with the Program Director regarding the application process.

Special Note Regarding American Registry of Radiologic Technologists (ARRT) Certification

Students must comply with the "Rules of Ethics" contained in the American Registry of Radiologic Technologists (ARRT) Standards of Ethics. The "Rules of Ethics" are minimally acceptable standards of professional conduct for all Registered Technologists and Applicants. The "Rules of Ethics" are intended to promote protection, safety and comfort of patients. Registered Technologists and applicants engaging in any of the conduct or activities noted in the "Rules of Ethics" or in the conviction of a crime, including a felony, gross misdemeanor or a misdemeanor with sole exception of speeding and parking violations, all alcohol and drug related violations are subject to sanctions and must be reported. Applicants who have questions regarding limitations related to licensure should contact the ARRT directly.

To be eligible for the Certificate of Accomplishment, the student must have an Associate in Science degree in Radiologic Technology. A Certificate of Accomplishment will be granted upon completion of the program requirements.

Required Courses:

- RTEC 216 - Clinical Education 2 2 units
- RTEC 220 - Clinical Experience 6 3 units
- RTEC 328 - Clinical Experience 7 4.5 units

Total Units: 9.5

Recreation Leadership Certificate of Accomplishment

A Certificate of Accomplishment will be granted upon completion of all program requirements. All units required for the certificate must be completed at El Camino College.

Required Core: 9 units

- FAID 1 - First Aid, Cardiopulmonary Resuscitation (CPR) and Basic Emergency Care 3 units
- RECR 207 - Introduction to Recreation 3 units
- RECR 217 - Recreational Leadership 3 units

6 units from:

- CDEV 104 - The Home, The School, The Community 3 units
- PE 201 - Introduction to Adapted Physical Education 2 units
- PE 217 - Sports Officiating 2 units
- PE 247 - Swimming, Lifeguard Training 2 units
- PE 277 - Introduction to Kinesiology 3 units

Total Units: 15

Residential Construction Trainee Certificate of Accomplishment

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/constructiontech.

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Courses: 14 units

- CTEC 100 - Building Fundamentals 4 units
or
- CTEC 110 - Additions and Remodeling 4 units

- CTEC 172 - Residential Electrical Wiring 4 units
- CTEC 180 - Residential Plumbing 4 units

- CTEC 200 - General Cabinet Making 2 units
or
- CTEC 201 - Upper Residential Cabinets 2 units
or
- CTEC 202 - Base Residential Cabinets 2 units
or
- CTEC 203 - Dedicated Use Cabinets 2 units

Total Units: 14

Residential Electrical Trainee Certificate of Accomplishment

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/constructiontech.

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Courses: 8 units

- CTEC 100 - Building Fundamentals 4 units
- CTEC 172 - Residential Electrical Wiring 4 units

Total Units: 8

Residential Plumbing Trainee Certificate of Accomplishment

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/constructiontech.

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Courses: 8 units

- CTEC 100 - Building Fundamentals 4 units
- CTEC 180 - Residential Plumbing 4 units

Total Units: 8

Residential Remodeling Trainee Certificate of Accomplishment

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/constructiontech.

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Courses: 8 units

- CTEC 100 - Building Fundamentals 4 units
- CTEC 110 - Additions and Remodeling 4 units

Total Units: 8

Robotics Certificate of Accomplishment

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/electronics.

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Courses: 12 units

- ECHT 11 - Introduction to Electronics 3 units
- ECHT 22 - Basic Electronic Fabrication 3 units
- ECHT 130 - Digital Systems and Computer Logic I 3 units
- ECHT 191 - Introduction to Microprocessors and Interfacing 3 units

Total Units: 12

Semi-Automatic Welding Certificate of Accomplishment

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/welding/.

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Courses: 15 units

- WELD 1A - Introduction to Multi-Process Welding 4 units
or
- WELD 1B - Advanced Welding for Manufacturing 4 units

- WELD 10C - Advanced Certification and Career Preparation Lab 2 units
- WELD 20A - Flux Core and Gas Metal Arc Welding 4 units
- WELD 23 - Advanced Arc Welding Specialty Lab 2 units
- WELD 28 - American Welding Society (AWS) D1.1 Certification Test Preparation 3 units

Total Units: 15

Shielded Metal Arc Welding (SMAW) Structural Steel Certificate of Accomplishment

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/welding/.

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Courses: 16 units

- WELD 10A - Introduction to Shielded Metal Arc Welding (SMAW) 4 units
or
- WELD 10B - Intermediate Shielded Metal Arc Welding (SMAW) 4 units

- WELD 10C - Advanced Certification and Career Preparation Lab 2 units
- WELD 28 - American Welding Society (AWS) D1.1 Certification Test Preparation 3 units
- WELD 29 - Blueprint Reading 3 units

Total Units: 16

Structural Steel Fabrication Certificate of Accomplishment

For Gainful Employment program information, please visit www.elcamino.edu/academics/indtech/welding/.

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

Required Courses: 14-15 units

- WELD 1A - Introduction to Multi-Process Welding 4 units
or
- WELD 10A - Introduction to Shielded Metal Arc Welding (SMAW) 4 units
or
- WELD 40A - Introduction to Gas Tungsten Arc Welding (GTAW) 3 units

- WELD 15 - Basic Welding for Allied Fields 3 units
- WELD 29 - Blueprint Reading 3 units
- WELD 45 - Structural Fabrication 5 units

Total Units: 14-15

ESL for Childhood Educators Certificate of Competency

The ESL for Childhood Educators program prepares intermediate ESL students for careers in child care. The curriculum also serves as a pathway to the credit Childhood Education program. Students gain knowledge in essential vocabulary for understanding the basics of child growth and development, communicating with parents or future employers, health and safety, and duties of child care providers.

A Certificate of Competency will be granted upon completion of all program requirements.

Required Courses:

- ESL 05A - ESL for Childhood Educators I 0 units
- ESL 05B - ESL for Childhood Educators II 0 units
- Total Units: 0

ESL for Healthcare Certificate of Competency

The ESL for Healthcare Certificate of Competency prepares intermediate ESL students for careers in healthcare. The curriculum also serves as a pathway to noncredit and credit Career and Technical Education (CTE) programs. Students gain knowledge on essential vocabulary used in communicating in the healthcare field, understanding verbal and written directions, medical emergencies, medication, cardiopulmonary resuscitation (CPR), first aid, safety, and basic patient needs.

A Certificate of Competency will be granted upon completion of all program requirements.

Required Courses:

- ESL 04A - ESL for Healthcare 0 units
- ESL 04B - ESL for Healthcare II 0 units

Total Units: 0

ESL for Healthcare II Certificate of Competency

The ESL for Healthcare II Certificate of Competency provides intermediate to advanced ESL students with the specific English needed to succeed in several courses that are prerequisites for entrance into El Camino College's healthcare programs such as Anatomy 30, Anatomy 32, Anatomy and Physiology 34A and 34B, and Radiologic Technology A. It also provides students English support for entry-level courses in the healthcare programs and helps students learn how to communicate and interact appropriately with future employers, colleagues, and patients within a variety of healthcare contexts.

A Certificate of Competency will be granted upon completion of all program requirements.

Required Courses:

- ESL 08 - ESL for Medical Terminology 0 units
- ESL 09A - ESL for Anatomy and Physiology I 0 units
- ESL 09B - ESL for Anatomy and Physiology II 0 units

One course from:

- ESL 06 - ESL Support for Career and Technical Programs 0 units
- ESL 10 - ESL for Radiological Technology I 0 units

Total Units: 0

ESL for Math Certificate of Competency

The ESL for Math Certificate of Competency prepares ESL students for success in arithmetic, algebra, geometry, and statistics courses at El Camino College. Students learn vocabulary and grammatical structures utilized in mathematical courses and mathematical problems including word problems. Students also learn the communicative skills they need to communicate effectively in math courses.

A Certificate of Competency will be granted upon completion of all program requirements.

Required Courses:

- ESL 07A - ESL for Math I 0 units
- ESL 07B - ESL for Math II 0 units
- ESL 07C - ESL for Math III 0 units

Total Units: 0

CSU General Education Breadth Requirements

General Education Breadth Requirements are designed so that students may take lower division general education courses at a California community college such that when a student transfers, the student will have completed most, if not all, of the lower division general education requirements.

Certification

Certification means that El Camino College has verified that the student has completed the lower division general education requirements for the CSU. For full certification, students must complete 39 units from Categories A through E of the CSU General Education Requirements. Twelve of the 39 units must be completed at El Camino College. CSU certification may be requested in Admissions. Courses may be listed in multiple categories, but can only be certified in one area.

CSU General Education Requirements

Area A - Communication in the English Language and Critical Thinking

minimum 9 semester units or 12 quarter units

One course from each subsection.

1. Communication Studies

- COMS 100 - Public Speaking 3 units
- COMS 120 - Argumentation and Debate 3 units
- COMS 130 - Interpersonal Communication 3 units
- COMS 140 - Small Group Communication 3 units

2. English

- ENGL 1A - Reading and Composition 4 units
- ENGL 1AH - Honors Reading and Composition 4 units

3. English

- ENGL 1C - Critical Thinking and Composition 3 units
- ENGL 1CH - Honors Critical Thinking and Composition 3 units
- PHIL 105 - Critical Thinking and Discourse 3 units
- PHIL 106 - Introduction to Symbolic Logic 3 units
- PSYC 3 - Critical Thinking and Psychology 3 units
- COMS 120 - Argumentation and Debate 3 units

Area B - Physical Universe and its Life Forms

minimum 9 semester units or 12 quarter units

One course must be completed from each subsection; one course must include a laboratory (marked by *).

1. Physical Sciences:

- ASTR 12 - Astronomy Laboratory 1 unit *
- ASTR 20 - The Solar System 3 units
- ASTR 25 - Stars and Galaxies 3 units
- ASTR 25H - Honors Stars and Galaxies 3 units
- CHEM 1A - General Chemistry I 5 units *
- CHEM 1B - General Chemistry II 5 units *
- CHEM 4 - Beginning Chemistry 5 units *
- CHEM 4H - Honors Beginning Chemistry 5 units
- CHEM 7A - Organic Chemistry I 5 units *
- CHEM 7B - Organic Chemistry II 5 units *
- CHEM 20 - Fundamentals of Chemistry 5 units *
- CHEM 21A - Survey of General and Organic Chemistry 4 units *
- CHEM 21B - Survey of Organic and Biochemistry 4 units *
- GEOG 1 - Physical Geography 3 units
- GEOG 6 - Physical Geography Laboratory 1 unit *
- GEOG 9 - Weather and Climate 3 units
- GEOL 1 - Physical Geology 3 units
- GEOL 2 - History of Planet Earth 3 units
- GEOL 3 - Physical Geology Laboratory 1 unit *
- GEOL 4 - History of Planet Earth Laboratory 1 unit *
- GEOL 6 - Earth Science in Education 4 units *
- GEOL 15 - Natural Disasters 3 units
- GEOL 30 - Geology Laboratory of Death Valley 1 unit *
- GEOL 32 - Geology Laboratory of Owens Valley and Sierra Nevada 1 unit *
- GEOL 34 - Geology Laboratory of Southeastern California 1 unit *
- GEOL 36 - Geology Laboratory of Coastal California 1 unit *
- OCEA 10 - Introduction to Oceanography 4 units *
- PSCI 25 - Exploring Physical Sciences 3 units *
- PHYS 1A - Mechanics of Solids 4 units *
- PHYS 1B - Fluids, Heat and Sound 3 units *
- PHYS 1C - Electricity and Magnetism 4 units *
- PHYS 1D - Optics and Modern Physics 4 units
- PHYS 2A - General Physics 4 units *
- PHYS 2B - General Physics 4 units *
- PHYS 3A - General Physics with Calculus 5 units *
- PHYS 3B - General Physics with Calculus 5 units *
- PHYS 11 - Descriptive Introduction to Physics 3 units
- PHYS 12 - Laboratory for Introductory Physics 1 unit *

2. Life Sciences:

- ANAT 30 - Essentials of Anatomy and Physiology 4 units *
- ANAT 32 - General Human Anatomy 4 units *
- APHY 34A - Anatomy and Physiology I 4 units *
- APHY 34B - Anatomy and Physiology II 4 units *
- ANTH 1 - Introduction to Physical Anthropology 3 units
- ANTH 5 - Physical Anthropology Laboratory 1 unit *
- BIOL 8 - Biology of Plants 4 units *
- BIOL 10 - Fundamentals of Biology 4 units *
- BIOL 11 - Fundamentals of Zoology 4 units *
- BIOL 12 - Field Zoology 4 units *
- BIOL 15 - Environmental Aspects of Biology 3 units
- BIOL 16 - Field Entomology 4 units *
- BIOL 17 - Marine Biology 3 units
- BIOL 18 - Marine Biology Laboratory 1 unit *
- BIOL 101 - Principles of Biology I 5 units *
- BIOL 101H - Honors Principles of Biology I 5 units
- BIOL 102 - Principles of Biology II 5 units *
- BIOL 102H - Honors Principles of Biology II 5 units
- BIOL 103 - Fundamentals of Molecular Biology 3 units
- MICR 33 - General Microbiology 5 units *

- PHYO 31 - Human Physiology 4 units *
- PSYC 7 - Physiological Psychology 3 units

3. The courses listed above in B.1. and B.2. marked with an asterisk meet the laboratory requirement.

4. Mathematics/Quantitative Reasoning:

- BUS 15 - Business Mathematics 3 units
- BUS 17 - Personal Finance 3 units
- MATH 110 - Structures and Concepts in Mathematics 3 units
- MATH 120 - Nature of Mathematics 3 units
- MATH 130 - College Algebra 3 units
- MATH 140 - Finite Mathematics for Business and Social Sciences 4 units
- MATH 150 - Elementary Statistics with Probability 4 units
- MATH 150H - Honors Elementary Statistics with Probability 4 units
- MATH 165 - Calculus for Business and Social Sciences 5 units
- MATH 170 - Trigonometry 3 units
- MATH 180 - Pre-Calculus 5 units
- MATH 190 - Single Variable Calculus and Analytic Geometry I 5 units
- MATH 210 - Introduction to Discrete Structures 5 units
- MATH 220 - Multi-Variable Calculus 5 units
- MATH 270 - Differential Equations with Linear Algebra 5 units
- PSYC 9A - Introduction to Statistics and Data Analysis for the Behavioral Sciences 4 units
- SOCI 109A - Introduction to Statistics and Data Analysis for the Behavioral Sciences 4 units

Area C - Arts, Literature, Philosophy and Foreign Languages

minimum 9 semester units or 12 quarter units

At least one course from subsection 1 and one course from subsection 2.

1. Arts:

- ARCH 104 - History of Western Architecture 3 units
- ARCH 107 - World Architecture: Pre-History to Middle Ages 3 units
- ARCH 108 - World Architecture: Gothic to Early Modern 3 units
- ART 101 - Art and Visual Culture: A Global Perspective 3 units
- ART 102A - History of Western Art - Prehistoric to Gothic 3 units
- ART 102AH - Honors History of Western Art - Prehistoric to Gothic 3 units
- ART 102B - History of Western Art - Proto-Renaissance to 19th Century 3 units
- ART 102C - History of Western Art - 19th Century to Contemporary Times 3 units
- ART 106 - Cross-Cultural Art 3 units
- ART 109 - Contemporary Art in World Cultures 3 units
- ART 150 - The Art of Photography 3 units
- ART 205A - History of Asian Art - India and Southeast Asia 3 units
- ART 205B - History of Asian Art - China, Korea, and Japan 3 units
- ART 207 - Art History of Mexico and Central and South America 3 units
- ART 208 - History of American Art 3 units
- ART 209 - History of African Art 3 units
- COMS 250 - Oral Interpretation of Literature 3 units
- DANC 101 - Dance Appreciation 3 units
- DANC 103 - History of Dance in the 20th Century 3 units
- FASH 31 - History of Costume 3 units
- FILM 110 - Film Appreciation 3 units
- FILM 154 - Regional Cinemas 3 units
- MUSI 111 - Music Appreciation Survey 3 units
- MUSI 112 - Music Cultures of the World 3 units
- MUSI 112H - Honors Music Cultures of the World 3 units
- MUSI 113 - Survey of Jazz 3 units
- MUSI 116 - History of Rock Music 3 units
- MUSI 117 - Music of the Beatles 3 units
- MUSI 215A - Music History and Literature up to 1750 3 units
- MUSI 215B - Music History and Literature - 1750 to Present 3 units
- PHOT 150 - The Art of Photography 3 units
- THEA 103 - Theatre Appreciation 3 units
- THEA 104 - Dramatic Literature 3 units
- THEA 113 - Introduction to Acting 3 units

2. Humanities:

- ASTU 7 - History of American Popular Culture 3 units
- CHIN 1 - Elementary Chinese I 4 units
- CHIN 2 - Elementary Chinese II 4 units
- CHIN 3 - Intermediate Chinese I 4 units
- CHIN 24 - Introduction to Chinese Language and Culture 3 units
- ENGL 1B - Literature and Composition 3 units
- ENGL 1BH - Honors Literature and Composition 3 units
- ENGL 12 - Introduction to Fiction 3 units
- ENGL 15A - Survey of British Literature I 3 units
- ENGL 15B - Survey of British Literature II 3 units
- ENGL 20 - Shakespeare's Plays - Tragedies and Romances 3 units
- ENGL 21 - Shakespeare's Plays - Comedies and Histories 3 units
- ENGL 24A - Creative Writing: Introduction to Poetry 3 units
- ENGL 25A - Creative Writing: Introduction to the Craft of Fiction 3 units
- ENGL 27 - Children's Literature 3 units
- ENGL 28 - Images of Women in Literature 3 units
- ENGL 30 - The English Bible as Literature 3 units
- ENGL 31 - Mythology and Folklore 3 units
- ENGL 34 - The Short Story 3 units
- ENGL 35 - World Literature: 3500 BCE to 1650 CE 3 units
- ENGL 36 - World Literature: 1650 CE to Present 3 units
- ENGL 39 - Literature and Film 3 units
- ENGL 40A - American Literature I 3 units
- ENGL 40B - American Literature II 3 units
- ENGL 41B - Survey of Film: 1950 to the Present 3 units
- ENGL 42 - Chicano and Latino Literature 3 units
- ENGL 43 - African American Literature 3 units
- ENGL 44 - The Literature of American Ethnic Groups 3 units
- ENGL 48 - Modern Literature of Latin America 3 units
- FILM 153 - American Independent Cinema 3 units
- FREN 1 - Elementary French I 4 units
- FREN 2 - Elementary French II 4 units
- FREN 3 - Intermediate French I 4 units
- FREN 4 - Intermediate French II 4 units
- FREN 5 - Advanced French I 3 units
- FREN 6 - Advanced French II 3 units
- GERM 1 - Elementary German I 4 units
- GERM 2 - Elementary German II 4 units
- HIST 101 - United States History to 1877 3 units
- HIST 102 - United States History from 1877 to the Present 3 units
- HIST 105 - Women and American History from the Colonial Era to 1877 3 units
- HIST 106 - Women and American History from 1877 to the Present 3 units
- HIST 108 - United States History: The American Indian Experience 3 units
- HIST 110 - The African American in the United States to 1877 3 units
- HIST 111 - The African American in the United States from 1877 to the Present 3 units
- HIST 112 - History of the Chicano in the United States 3 units
- HIST 114 - History of the Asian American in the United States 3 units
- HIST 122 - United States Social History: Cultural Pluralism in America 3 units
- HIST 128 - History of California 3 units
- HIST 129 - History of Los Angeles 3 units
- HIST 140 - History of Early Civilizations 3 units
- HIST 141 - History of Modern Civilizations 3 units
- HIST 152 - History of Latin America through Independence 3 units
- HIST 154 - A History of Mexico 3 units
- HUMA 1 - An Introduction to the Humanities 3 units
- ITAL 1 - Elementary Italian I 4 units
- ITAL 2 - Elementary Italian II 4 units
- ITAL 24 - Introduction to Italian Culture 3 units
- JAPA 1 - Elementary Japanese I 4 units
- JAPA 2 - Elementary Japanese II 4 units
- JAPA 3 - Intermediate Japanese I 4 units
- JAPA 4 - Intermediate Japanese II 4 units
- JAPA 25 - Cultural Aspects of the Japanese Language 3 units
- PHIL 101 - Introduction to Philosophy 3 units
- PHIL 103 - Ethics and Society 3 units
- PHIL 107 - Philosophy of Religion 3 units
- PHIL 111 - History of Ancient and Medieval Philosophy 3 units

- PHIL 112 - History of Modern Philosophy 3 units
- PHIL 114 - Asian Philosophy 3 units
- PHIL 115 - Existentialism 3 units
- PHIL 117 - Political Philosophy 3 units
- PHIL 120 - Ethics, Law and Society 3 units
- POLI 7 - Political Philosophy 3 units
- SLAN 111 - American Sign Language I 4 units
- SLAN 112 - American Sign Language II 4 units
- Sign Language/Interpreter Training 113
- SLAN 114 - American Sign Language IV 4 units
- SLAN 115 - American Sign Language V 4 units
- SLAN 130 - Deaf Culture 3 units
- SPAN 1 - Elementary Spanish I 4 units
- SPAN 2 - Elementary Spanish II 4 units
- SPAN 3 - Intermediate Spanish I 4 units
- SPAN 4 - Intermediate Spanish II 4 units
- SPAN 5 - Advanced Spanish I 3 units
- SPAN 6 - Advanced Spanish II 3 units
- SPAN 52A - Spanish for Native Speakers I 4 units
- SPAN 52B - Spanish for Native Speakers II 4 units

Area D - Social, Political and Economic Institutions and Behavior; Historical Background
minimum 9 semester units or 12 quarter units

Courses must be selected from at least two different subsections.

Courses listed in more than one subsection/area can be used for credit in one subsection/area only.

1. Anthropology and Archaeology:

- ANTH 2 - Introduction to Cultural Anthropology 3 units
- ANTH 3 - Introduction to Archaeology 3 units
- Anthropology 4
- ANTH 6 - Native Peoples of North America 3 units
- ANTH 7 - Native Peoples of South America 3 units
- ANTH 8 - Ancient Civilizations of Mesoamerica 3 units
- ANTH 9 - Women, Culture, and Society 3 units
- ANTH 11 - Anthropology of Religion, Magic and Witchcraft 3 units

2. Economics:

- ECON 1 - Principles of Economics: Macroeconomics 3 units
- ECON 2 - Principles of Economics: Microeconomics Theory 3 units
- ECON 5 - Fundamentals of Economics 3 units

3. Ethnic Studies:

- COMS 260 - Introduction to Intercultural Communication 3 units
- COMS 275 - Gender Communication 3 units
- ESTU 1 - Introduction to Ethnic Studies 3 units
- ESTU 3 - The Chicano in Contemporary United States Society 3 units
- ESTU 5 - Chicano Culture 3 units
- HIST 108 - United States History: The American Indian Experience 3 units
- HIST 110 - The African American in the United States to 1877 3 units
- HIST 111 - The African American in the United States from 1877 to the Present 3 units
- HIST 112 - History of the Chicano in the United States 3 units
- HIST 122 - United States Social History: Cultural Pluralism in America 3 units
- POLI 5 - Ethnicity in the American Political Process 3 units
- PSYC 10 - African American Psychology 3 units
- SOCI 107 - Issues of Race and Ethnicity in the United States 3 units

4. Gender Studies:

- ANTH 9 - Women, Culture, and Society 3 units
- HIST 105 - Women and American History from the Colonial Era to 1877 3 units
- HIST 106 - Women and American History from 1877 to the Present 3 units
- WSTU 1 - Introduction to Women's Studies 3 units

5. Geography:

- GEOG 2 - Cultural Geography 3 units
- GEOG 5 - World Regional Geography 3 units
- GEOG 5H - Honors World Regional Geography 3 units
- GEOG 7 - Geography of California 3 units

6. History:

- HIST 101 - United States History to 1877 3 units
- HIST 102 - United States History from 1877 to the Present 3 units
- HIST 105 - Women and American History from the Colonial Era to 1877 3 units

- HIST 106 - Women and American History from 1877 to the Present 3 units
- HIST 108 - United States History: The American Indian Experience 3 units
- HIST 110 - The African American in the United States to 1877 3 units
- HIST 111 - The African American in the United States from 1877 to the Present 3 units
- HIST 112 - History of the Chicano in the United States 3 units
- HIST 114 - History of the Asian American in the United States 3 units
- HIST 122 - United States Social History: Cultural Pluralism in America 3 units
- HIST 128 - History of California 3 units
- HIST 129 - History of Los Angeles 3 units
- HIST 140 - History of Early Civilizations 3 units
- HIST 141 - History of Modern Civilizations 3 units
- History 143
- HIST 152 - History of Latin America through Independence 3 units
- HIST 154 - A History of Mexico 3 units
- History 162
- History 163

7. Interdisciplinary Social/Behavioral Science:

- ASTU 7 - History of American Popular Culture 3 units
- BUS 22 - Human Relations in Organizations 3 units
- CDEV 103 - Child Growth and Development 3 units
- COMS 260 - Introduction to Intercultural Communication 3 units
- COMS 265 - Mass Communication 3 units
- JOUR 12 - Mass Media and Society 3 units
- SLAN 130 - Deaf Culture 3 units

8. Political Science, Government and Legal Institutions:

- PHIL 117 - Political Philosophy 3 units
- POLI 1 - Governments of the United States and California 3 units
- POLI 1H - Honors Governments of the United States and California 3 units
- POLI 2 - Introduction to Comparative Politics 3 units
- POLI 3 - Introduction to Principles and Methods of Political Science 3 units
- POLI 5 - Ethnicity in the American Political Process 3 units
- POLI 6 - Civil Rights and Liberties in the United States 3 units
- POLI 7 - Political Philosophy 3 units
- POLI 10 - Introduction to International Relations 3 units

9. Psychology:

- PE 275 - Sport Psychology 3 units
- PSYC 2 - Psychology for Effective Living 3 units
- PSYC 5 - General Psychology 3 units
- PSYC 5H - Honors General Psychology 3 units
- PSYC 8 - Social Psychology 3 units
- PSYC 9B - Research Methods in the Behavioral Sciences 4 units
- PSYC 10 - African American Psychology 3 units
- PSYC 12 - Human Sexuality 3 units
- PSYC 15 - Abnormal Psychology 3 units
- PSYC 16 - Lifespan Development 3 units
- PSYC 17 - Cultural Psychology 3 units

10. Sociology and Criminology:

- SOCI 101 - Introduction to Sociology 3 units
- SOCI 102 - The Family 3 units
- SOCI 104 - Social Problems 3 units
- SOCI 107 - Issues of Race and Ethnicity in the United States 3 units
- SOCI 108 - Global Perspectives on Race and Ethnicity 3 units
- SOCI 112 - Introduction to Criminology 3 units
- SOCI 113 - Gender and Society 3 units
- SOCI 115 - Sociology of Death and Dying 3 units
- SSCI 101 - Introduction to Social Sciences 3 units
- SSCI 103 - Introduction to Social Justice Studies 3 units

Area E - Lifelong Understanding and Self-Development

minimum 3 semester units or 4-5 quarter units

- BUS 22 - Human Relations in Organizations 3 units
- CDEV 103 - Child Growth and Development 3 units
- CH 1 - Personal and Community Health Issues 3 units
- CH 5 - Contemporary Women's Health 3 units
- HDEV 110 - Strategies for Creating Success in College and in Life 3 units
- HDEV 115 - Career Development Across the Lifespan 3 units
- NFOO 11 - Nutrition 3 units
- PE 258 - Power Vinyasa Yoga 1 unit

- PE 259 - Circuit Training 1 unit
- PE 275 - Sport Psychology 3 units
- PE 280 - Exercise and Nutrition Programs for Fitness and Weight Management 3 units
- PSYC 2 - Psychology for Effective Living 3 units
- PSYC 12 - Human Sexuality 3 units
- PSYC 16 - Lifespan Development 3 units
- SOCI 102 - The Family 3 units

One unit may be taken from:

- Physical Education 10
- PE 2 - Walking for Fitness 1 unit
- PE 3 - Boot Camp Fitness Training 1 unit
- PE 4 - Basketball 1 unit
- PE 7 - Baseball 1 unit
- PE 47 - Introduction to Indoor Rock Climbing 1 unit
- PE 54 - Weight Training 1 unit
- PE 57abc - Intercollegiate Swimming Teams 3 units
- PE 58abc - Off-Season Training for Intercollegiate Swimming Teams 1 unit
- PE 66abc - Off-Season Training for Men's Intercollegiate Tennis Team 1 unit
- PE 70abc - Men's Intercollegiate Soccer Team 3 units
- PE 71abc - Off-Season Training for Men's Intercollegiate Soccer Team 1 unit
- PE 74 – Beginning Soccer 1 unit
- PE 80abc - Men's Intercollegiate Volleyball Team 3 units
- PE 81abc - Off-Season Training for Men's Intercollegiate Volleyball Team 1 unit
- PE 110abc - Women's Intercollegiate Volleyball Team 3 units
- PE 111abc - Off-Season Training for Women's Intercollegiate Volleyball Team 1 unit
- PE 132abc - Women's Intercollegiate Badminton Team 3 units
- PE 133abc - Off-Season Training for Women's Intercollegiate Badminton Team 1 unit
- PE 140abc - Intercollegiate Sand Volleyball Team 3 units
- PE 204 - Badminton 1 unit
- PE 220 - Naginata: A Japanese Martial Art 1 unit
- PE 221 - Combative Arts and Self Defense 1 unit
- PE 224 - Golf 1 unit
- PE 233 - Pep Squad and Cheer 1 unit
- PE 234ab - Pep Squad and Cheer Competition 1 unit
- PE 240A - Beginning Swimming 1 unit
- PE 240B - Intermediate Swimming 1 unit
- PE 240C - Advanced Swimming 1 unit
- PE 247 - Swimming, Lifeguard Training 2 units
- PE 249 - Swimming for Fitness 1 unit
- PE 250 - Techniques of Surfboard Riding 1 unit
- PE 251A - Beginning Tennis 1 unit
- PE 253 - Volleyball 1 unit
- PE 254 - Cardio Fitness and Body Sculpting 1 unit
- PE 257 - Yoga for Health and Fitness 1 unit
- PE 260 - Basic Principles of Fitness and Weight Control 1 unit
- PE 400 - Adapted Fitness 1 unit
- PE 401 - Adapted Strength Training 1 unit
- PE 402 - Adapted Swimming and Hydroexercise 1 unit
- PE 404 - Adapted Cardiovascular Fitness 1 unit
- PE 407 - Adapted Bowling 1 unit
- PE 409 - Adapted Yoga 1 unit

Note:

(Warning: an Area E approved two-unit course would be required with one of these one-unit courses to meet the 3 unit minimum. El Camino College does not currently offer an approved 2-unit course in this area. See your counselor for further information.)

All CSU campuses have a graduation requirement in U.S. History, Constitution, and American Ideals of 6 semester units. One course is required from Group 1 and one course is required from Group 2.

Group 1:

- HIST 101 - United States History to 1877 3 units
- HIST 102 - United States History from 1877 to the Present 3 units
- HIST 105 - Women and American History from the Colonial Era to 1877 3 units
- HIST 106 - Women and American History from 1877 to the Present 3 units
- HIST 108 - United States History: The American Indian Experience 3 units
- HIST 110 - The African American in the United States to 1877 3 units
- HIST 111 - The African American in the United States from 1877 to the Present 3 units
- HIST 112 - History of the Chicano in the United States 3 units
- HIST 122 - United States Social History: Cultural Pluralism in America 3 units

Group 2:

- POLI 1 - Governments of the United States and California 3 units

Intersegmental General Education Transfer Curriculum (IGETC)

The Intersegmental General Education Transfer Curriculum (IGETC) is a series of courses prospective transfer students attending California community colleges may complete at the community college to satisfy the lower division breadth/general education requirements at both the University of California and the California State University.

Students have the option of completing the IGETC or the specific lower division breadth/general education requirements of the school or college at the campus they plan to attend. The IGETC must be completed prior to transfer. The University has an agreement with each California community college that specifies which of its courses may be applied to each category of the IGETC. All courses must be completed with a grade of C or better.

The IGETC is most helpful to students who want to keep their options open. Certain majors, however, will not be well served by following IGETC. Students who intend to transfer into majors that require extensive lower division preparation, such as those in engineering or the physical and natural sciences, should concentrate on completing as many prerequisites for the major before transfer. The IGETC is not an admission requirement. Completing IGETC does not guarantee admission to the campus or program of choice. However, completing the lower division breadth/general education requirements, whether through the IGETC or the campus specific requirements, may be considered by the campus in the selection process. Students who do not complete the IGETC before transferring will be required to satisfy the campus-specific lower division general education requirements of the college they attend.

Certification

Certification means that the last community college attended prior to transfer will verify that the student has completed the entire IGETC pattern. It is the student's responsibility to obtain full certification during the last semester of attendance prior to transfer. IGETC certification may be requested in Admissions.

IGETC Course Requirements

Area 1: English Communication

UC and CSU transfers complete groups A and B; Group C is required for CSU transfers only.

Group A: ENGL 1A, ENGL 1AH

Group B: One course from: ENGL 1C, ENGL 1CH, PHIL 105, PSYC 3; [The following two - course combinations acceptable if ENGL 1B was taken prior to fall, 1993: ENGL 1B and PHIL 106 or ENGL 1B and PSYC 3 (PSYC 3 stands alone if taken fall, 1992 or later)]

Group C (CSU transfers only): One course from: COMS 100, COMS 120, COMS 130, COMS 140?

Area 2: Mathematical Concepts and Quantitative Reasoning

One course, 3 semester or 4-5 quarter units:

- MATH 115 - Probability and Statistics for Prospective Elementary School Teachers 3 units ø #
- MATH 120 - Nature of Mathematics 3 units
- MATH 130 - College Algebra 3 units +
- MATH 140 - Finite Mathematics for Business and Social Sciences 4 units
- MATH 150 - Elementary Statistics with Probability 4 units #
- MATH 150H - Honors Elementary Statistics with Probability 4 units
- MATH 165 - Calculus for Business and Social Sciences 5 units
- MATH 180 - Pre-Calculus 5 units #
- MATH 190 - Single Variable Calculus and Analytic Geometry I 5 units #
- MATH 191 - Single Variable Calculus and Analytic Geometry II 5 units #
- MATH 210 - Introduction to Discrete Structures 5 units
- MATH 220 - Multi-Variable Calculus 5 units
- MATH 270 - Differential Equations with Linear Algebra 5 units
- PSYC 9A - Introduction to Statistics and Data Analysis for the Behavioral Sciences 4 units ?
- PSYC 9A - Introduction to Statistics and Data Analysis for the Behavioral Sciences 4 units

Area 3: Arts and Humanities

Three courses, 9 semester or 12-15 quarter units; at least one course from Arts and one course from Humanities:

A. Arts:

- ART 101 - Art and Visual Culture: A Global Perspective 3 units
- ART 102A - History of Western Art - Prehistoric to Gothic 3 units
- ART 102AH - Honors History of Western Art - Prehistoric to Gothic 3 units
- ART 102B - History of Western Art - Proto-Renaissance to 19th Century 3 units
- ART 102C - History of Western Art - 19th Century to Contemporary Times 3 units
- ART 106 - Cross-Cultural Art 3 units
- ART 109 - Contemporary Art in World Cultures 3 units

- ART 150 - The Art of Photography 3 units
- ART 205A - History of Asian Art - India and Southeast Asia 3 units
- ART 205B - History of Asian Art - China, Korea, and Japan 3 units
- ART 207 - Art History of Mexico and Central and South America 3 units
- ART 208 - History of American Art 3 units
- ART 209 - History of African Art 3 units &
- DANC 101 - Dance Appreciation 3 units \$
- DANC 103 - History of Dance in the 20th Century 3 units °
- FILM 110 - Film Appreciation 3 units &
- FILM 154 - Regional Cinemas 3 units
- MUSI 111 - Music Appreciation Survey 3 units
- MUSI 112 - Music Cultures of the World 3 units
- MUSI 112H - Honors Music Cultures of the World 3 units
- MUSI 113 - Survey of Jazz 3 units
- MUSI 116 - History of Rock Music 3 units
- MUSI 117 - Music of the Beatles 3 units
- MUSI 215A - Music History and Literature up to 1750 3 units
- MUSI 215B - Music History and Literature - 1750 to Present 3 units
- PHOT 150 - The Art of Photography 3 units
- THEA 103 - Theatre Appreciation 3 units
- THEA 104 - Dramatic Literature 3 units

B. Humanities:

- ASTU 7 - History of American Popular Culture 3 units
- ANTH 4 - Language and Culture 3 units
- ANTH 11 - Anthropology of Religion, Magic and Witchcraft 3 units
- CHIN 2 - Elementary Chinese II 4 units ?
- CHIN 3 - Intermediate Chinese I 4 units
- CHIN 24 - Introduction to Chinese Language and Culture 3 units
- ENGL 1B - Literature and Composition 3 units +
- ENGL 1BH - Honors Literature and Composition 3 units
- ENGL 12 - Introduction to Fiction 3 units +
- ENGL 15A - Survey of British Literature I 3 units
- ENGL 15B - Survey of British Literature II 3 units
- ENGL 20 - Shakespeare's Plays - Tragedies and Romances 3 units
- ENGL 21 - Shakespeare's Plays - Comedies and Histories 3 units
- ENGL 27 - Children's Literature 3 units
- ENGL 28 - Images of Women in Literature 3 units
- ENGL 30 - The English Bible as Literature 3 units
- ENGL 31 - Mythology and Folklore 3 units
- ENGL 34 - The Short Story 3 units
- ENGL 35 - World Literature: 3500 BCE to 1650 CE 3 units
- ENGL 36 - World Literature: 1650 CE to Present 3 units
- ENGL 39 - Literature and Film 3 units
- ENGL 40A - American Literature I 3 units ~
- ENGL 40B - American Literature II 3 units ~
- ENGL 41B - Survey of Film: 1950 to the Present 3 units
- ENGL 42 - Chicano and Latino Literature 3 units ~
- ENGL 44 - The Literature of American Ethnic Groups 3 units
- ENGL 48 - Modern Literature of Latin America 3 units
- FILM 152
- FILM 153 - American Independent Cinema 3 units
- FREN 2 - Elementary French II 4 units
- FREN 3 - Intermediate French I 4 units
- FREN 4 - Intermediate French II 4 units
- GERM 2 - Elementary German II 4 units
- HIST 101 - United States History to 1877 3 units
- HIST 102 - United States History from 1877 to the Present 3 units
- HIST 105 - Women and American History from the Colonial Era to 1877 3 units
- HIST 106 - Women and American History from 1877 to the Present 3 units
- HIST 108 - United States History: The American Indian Experience 3 units
- HIST 110 - The African American in the United States to 1877 3 units
- HIST 111 - The African American in the United States from 1877 to the Present 3 units
- HIST 112 - History of the Chicano in the United States 3 units
- HIST 114 - History of the Asian American in the United States 3 units
- HIST 122 - United States Social History: Cultural Pluralism in America 3 units
- HIST 128 - History of California 3 units
- HIST 129 - History of Los Angeles 3 units
- HIST 140 - History of Early Civilizations 3 units

- HIST 141 - History of Modern Civilizations 3 units
- HIST 152 - History of Latin America through Independence 3 units
- HIST 154 - A History of Mexico 3 units
- HUMA 1 - An Introduction to the Humanities 3 units ?
- ITAL 2 - Elementary Italian II 4 units
- ITAL 24 - Introduction to Italian Culture 3 units
- JAPA 2 - Elementary Japanese II 4 units
- JAPA 3 - Intermediate Japanese I 4 units
- JAPA 4 - Intermediate Japanese II 4 units
- JAPA 25 - Cultural Aspects of the Japanese Language 3 units
- PHIL 101 - Introduction to Philosophy 3 units
- PHIL 103 - Ethics and Society 3 units
- PHIL 107 - Philosophy of Religion 3 units
- PHIL 111 - History of Ancient and Medieval Philosophy 3 units
- PHIL 112 - History of Modern Philosophy 3 units
- PHIL 114 - Asian Philosophy 3 units
- PHIL 115 - Existentialism 3 units
- PHIL 117 - Political Philosophy 3 units
- PHIL 120 - Ethics, Law and Society 3 units
- POLI 7 - Political Philosophy 3 units
- SLAN 112 - American Sign Language II 4 units ?
- SLAN 113 - American Sign Language III 4 units ?
- SLAN 114 - American Sign Language IV 4 units
- SLAN 115 - American Sign Language V 4 units
- SLAN 130 - Deaf Culture 3 units
- SPAN 2 - Elementary Spanish II 4 units
- SPAN 3 - Intermediate Spanish I 4 units
- SPAN 4 - Intermediate Spanish II 4 units
- SPAN 52A - Spanish for Native Speakers I 4 units Σ
- SPAN 52B - Spanish for Native Speakers II 4 units Σ

Area 4: Social and Behavioral Sciences

Three courses, 9 semester or 12-15 quarter units, from at least two disciplines or an interdisciplinary sequence:

- ASTU 7 - History of American Popular Culture 3 units ~
- ANTH 2 - Introduction to Cultural Anthropology 3 units
- ANTH 3 - Introduction to Archaeology 3 units
- ANTH 4 - Language and Culture 3 units ?
- ANTH 6 - Native Peoples of North America 3 units
- ANTH 7 - Native Peoples of South America 3 units ?
- ANTH 8 - Ancient Civilizations of Mesoamerica 3 units °
- ANTH 9 - Women, Culture, and Society 3 units ?
- ANTH 11 - Anthropology of Religion, Magic and Witchcraft 3 units ?
- CDEV 103 - Child Growth and Development 3 units &
- COMS 260 - Introduction to Intercultural Communication 3 units ?
- COMS 265 - Mass Communication 3 units ?
- COMS 275 - Gender Communication 3 units
- ECON 1 - Principles of Economics: Macroeconomics 3 units
- ECON 2 - Principles of Economics: Microeconomics Theory 3 units
- ECON 5 - Fundamentals of Economics 3 units #
- ESTU 1 - Introduction to Ethnic Studies 3 units ?
- ESTU 3 - The Chicano in Contemporary United States Society 3 units
- ESTU 5 - Chicano Culture 3 units
- GEOG 2 - Cultural Geography 3 units
- GEOG 5 - World Regional Geography 3 units
- GEOG 5H - Honors World Regional Geography 3 units
- GEOG 7 - Geography of California 3 units
- HIST 101 - United States History to 1877 3 units
- HIST 102 - United States History from 1877 to the Present 3 units
- HIST 105 - Women and American History from the Colonial Era to 1877 3 units
- HIST 106 - Women and American History from 1877 to the Present 3 units
- HIST 108 - United States History: The American Indian Experience 3 units
- HIST 110 - The African American in the United States to 1877 3 units
- HIST 111 - The African American in the United States from 1877 to the Present 3 units
- HIST 112 - History of the Chicano in the United States 3 units
- HIST 122 - United States Social History: Cultural Pluralism in America 3 units
- HIST 128 - History of California 3 units
- HIST 129 - History of Los Angeles 3 units
- HIST 140 - History of Early Civilizations 3 units

- HIST 141 - History of Modern Civilizations 3 units
- HIST 152 - History of Latin America through Independence 3 units
- HIST 154 - A History of Mexico 3 units
- JOUR 12 - Mass Media and Society 3 units
- PHIL 117 - Political Philosophy 3 units
- POLI 1 - Governments of the United States and California 3 units #
- POLI 2 - Introduction to Comparative Politics 3 units
- POLI 3 - Introduction to Principles and Methods of Political Science 3 units
- POLI 5 - Ethnicity in the American Political Process 3 units
- POLI 6 - Civil Rights and Liberties in the United States 3 units ±
- POLI 7 - Political Philosophy 3 units
- POLI 10 - Introduction to International Relations 3 units
- PSYC 2 - Psychology for Effective Living 3 units
- PSYC 5 - General Psychology 3 units
- PSYC 5H - Honors General Psychology 3 units
- PSYC 8 - Social Psychology 3 units
- PSYC 10 - African American Psychology 3 units ~
- PSYC 12 - Human Sexuality 3 units ?
- PSYC 15 - Abnormal Psychology 3 units ?
- PSYC 16 - Lifespan Development 3 units Σ
- PSYC 17 - Cultural Psychology 3 units
- SOCI 101 - Introduction to Sociology 3 units
- SOCI 102 - The Family 3 units ?
- SOCI 104 - Social Problems 3 units
- SOCI 107 - Issues of Race and Ethnicity in the United States 3 units ?
- SOCI 108 - Global Perspectives on Race and Ethnicity 3 units
- SOCI 112 - Introduction to Criminology 3 units ?
- SOCI 115 - Sociology of Death and Dying 3 units
- WSTU 1 - Introduction to Women's Studies 3 units >

Area 5: Physical and Biological Sciences

Two courses, 7-9 semester or 9-12 quarter units; one physical science course, one biological science course; at least one course must include a laboratory (*indicates a lab course):

A. Physical Sciences:

- ASTR 12 - Astronomy Laboratory 1 unit
- ASTR 20 - The Solar System 3 units #
- ASTR 25 - Stars and Galaxies 3 units #
- ASTR 25H - Honors Stars and Galaxies 3 units
- CHEM 1A - General Chemistry I 5 units *
- CHEM 1B - General Chemistry II 5 units *
- CHEM 4 - Beginning Chemistry 5 units * #
- CHEM 4H - Honors Beginning Chemistry 5 units
- CHEM 7A - Organic Chemistry I 5 units *
- CHEM 7B - Organic Chemistry II 5 units *
- CHEM 20 - Fundamentals of Chemistry 5 units * #
- CHEM 21A - Survey of General and Organic Chemistry 4 units *
- CHEM 21B - Survey of Organic and Biochemistry 4 units *
- GEOG 1 - Physical Geography 3 units
- GEOG 6 - Physical Geography Laboratory 1 unit *
- GEOG 9 - Weather and Climate 3 units
- GEOL 1 - Physical Geology 3 units
- GEOL 2 - History of Planet Earth 3 units
- GEOL 3 - Physical Geology Laboratory 1 unit *
- GEOL 4 - History of Planet Earth Laboratory 1 unit *
- GEOL 15 - Natural Disasters 3 units ^
- GEOL 30 - Geology Laboratory of Death Valley 1 unit *
- GEOL 32 - Geology Laboratory of Owens Valley and Sierra Nevada 1 unit *
- GEOL 34 - Geology Laboratory of Southeastern California 1 unit *
- GEOL 36 - Geology Laboratory of Coastal California 1 unit *
- OCEA 10 - Introduction to Oceanography 4 units *
- PSCI 25 - Exploring Physical Sciences 3 units ?
- PHYS 1A - Mechanics of Solids 4 units * #
- PHYS 1B - Fluids, Heat and Sound 3 units * #
- PHYS 1C - Electricity and Magnetism 4 units * #
- PHYS 1D - Optics and Modern Physics 4 units * #
- PHYS 2A - General Physics 4 units * #

- PHYS 2B - General Physics 4 units * #
- PHYS 3A - General Physics with Calculus 5 units * >
- PHYS 3B - General Physics with Calculus 5 units * \$
- PHYS 11 - Descriptive Introduction to Physics 3 units #
- PHYS 12 - Laboratory for Introductory Physics 1 unit * #

B. Biological Sciences:

- ANAT 30 - Essentials of Anatomy and Physiology 4 units * #
- ANAT 32 - General Human Anatomy 4 units * #
- APHY 34A - Anatomy and Physiology I 4 units *
- APHY 34B - Anatomy and Physiology II 4 units *
- ANTH 1 - Introduction to Physical Anthropology 3 units
- ANTH 5 - Physical Anthropology Laboratory 1 unit
- BIOL 8 - Biology of Plants 4 units * \$
- BIOL 10 - Fundamentals of Biology 4 units * #
- BIOL 11 - Fundamentals of Zoology 4 units * >
- BIOL 15 - Environmental Aspects of Biology 3 units
- BIOL 16 - Field Entomology 4 units *
- BIOL 17 - Marine Biology 3 units \$
- BIOL 18 - Marine Biology Laboratory 1 unit * \$
- BIOL 101 - Principles of Biology I 5 units *
- BIOL 101H - Honors Principles of Biology I 5 units
- BIOL 102 - Principles of Biology II 5 units *
- BIOL 102H - Honors Principles of Biology II 5 units
- BIOL 103 - Fundamentals of Molecular Biology 3 units \$
- MICR 33 - General Microbiology 5 units *
- PHYO 31 - Human Physiology 4 units #
- PSYC 7 - Physiological Psychology 3 units

C. Laboratory science courses are marked with an asterisk (*indicates a lab course):

Area 6 UC Only: Language other than English

The requirement may be met by one of the following:

A course at ECC: CH 1, FREN 1, GERM 1, ITAL 1, ITAL 2, JAPA 1, SLAN 111 ≠, SPAN 1, SPAN 52A, SPAN 52B.

1. Two years of high school coursework in a language other than English with a final grade of C or better. The two years must be in the same language (high school transcripts must be on file with ECC).
2. Foreign language course (or courses) at another college or university that is comparable to two years of high school foreign language.
3. Satisfactory score on the SAT II: Subject Test in languages other than English. (If taken before May 1995, use the first score; if taken after May 1995, use the second score): Chinese with Listening 500/520; French/French with Listening 500/540; German/German with Listening 500/510; Hebrew (modern) 500/470; Italian 500/520; Japanese with Listening 500/510; Korean /500; Latin 500/530; Spanish/Spanish with Listening 500/520.
4. Score of 3 or better on the College Board Advanced Placement Examinations in languages other than English.
5. Score of 5 or higher on the International Baccalaureate Higher Level Examinations in languages other than English.
6. A Defense Language Institute language other than English course which is indicated as passed with a "C" or higher on the official transcript.
7. Satisfactory completion of an achievement or proficiency test administered by a community college, university or other college in a language other than English. The test must assess the student proficiency at a level equivalent to at least two years of high school language. This conclusion must be posted on a transcript indicating unit, course title, and grade or on a document with letter head of the institution granting proficiency stating that the student has mastered proficiency in the language equivalent to two years of high school language.
8. Language other than English "O" level exam with a grade of A, B, or C.
9. Language other than English International "A" level exam with a score of 5, 6, 7.
10. Satisfactory completion of C grades or better, of two years of formal schooling at the sixth grade level or higher in an institution where the language of instruction is not English.

Note: If the secondary school was completed in a non-English speaking country and the language of instruction of the secondary school was not English, language other than English proficiency can be certified for IGETC without further evaluation. The student must present appropriate documentation of attendance at the secondary school.

CSU Only: Graduation requirement in American History and American Institutions: HIST 101, HIST 102, HIST 105, HIST 106, HIST 108, HIST 110, HIST 111, HIST 112, HIST 122

Institutions: POLI 1

- + Indicates course only acceptable in this area if taken fall, 1993 or later.
- ^ Indicates course only acceptable in this area if taken fall, 1995 or later
- ~ Indicates course only acceptable in this area if taken fall, 1997 or later.
- > Indicates course only acceptable in this area if taken fall, 1998 or later.
- \$ Indicates course only acceptable in this area if taken fall, 1999 or later.
- ° Indicates course only acceptable in this area if taken fall, 1999 or later.
- ? Indicates course only acceptable in this area if taken fall, 2001 or later.
- Σ Indicates course only acceptable in this area if taken fall, 2002 or later.

- ∅ Indicates course only acceptable in this area if taken fall, 2003 or later.
- & Indicates course only acceptable in this area if taken fall, 2004 or later.
- © Indicates course only acceptable in this area if taken fall, 2005 or later.
- ± Indicates course only acceptable in this area if taken fall, 2006 or later.
- ? Indicates course only acceptable in this area if taken fall, 2007 or later.
- # Indicates that transfer credit may be limited by UC or CSU or both; please consult with a counselor.

Intersegmental General Education Transfer Curriculum (IGETC): For general education courses taken after fall 2008, please check with your academic counselor or www.assist.org for course applicability and limitations.

Announcement of Courses

General Course Information

Catalog Course Description

The courses and programs presented on the next pages meet standards approved by the Board of Governors of the California Community Colleges as stated in the California Administrative Code, Title 5, Section 55002. All courses are taught by qualified instructors in accordance with a set of instructional objectives common to all students.

Appearance of a course description in this catalog does not obligate El Camino College to offer the course in any particular semester. For courses offered in a particular term, refer to the Schedule of Classes, that is published every fall, spring, and summer. The Schedule of Classes is available on the web at www.elcamino.edu/admissions/ and may also be obtained at the Bookstore for a nominal fee.

Course Numbering

Courses listed in this catalog are one-semester courses. Those with an upper case letter after the number, such as ENGL 1A-ENGL 1B, are a sequence and are organized accordingly.

Lower case letters after the course number, such as MUSI 259abcd, indicate the number of semesters the student may enroll in the course. Course sequences with a numerical designation only indicate that the subject be taken in the order beginning with the lowest number. SPAN 1, SPAN 2, SPAN 3, and SPAN 4 is an example.

Numbering on non-sequential courses does not necessarily indicate the order in which such courses must be taken. In all cases, the prerequisites and corequisites must be met before a student will be permitted to enroll.

Prerequisite, Corequisite, Recommended Preparation, Enrollment Limitation

Prerequisite: A Prerequisite is a condition of enrollment that a student is required to meet before enrolling in a course or educational program. A student who has not met the prerequisite would be highly unlikely to succeed in the course..

Corequisite: A Corequisite is a course that a student is required to take simultaneously to enroll in another course.

Recommended Preparation: Recommended Preparation is a condition of enrollment that a student is advised, but not required, to meet before, or in conjunction with, enrollment in a course or educational program.

Enrollment Limitation: An Enrollment Limitation means that a student may be required to meet certain conditions before enrolling in a course. This may apply to such courses as intercollegiate competition courses, public performance courses or honors courses.

A course Prerequisite, Corequisite, Recommended Preparation or Enrollment Limitation is subject to change. Questions regarding the status of the conditions of enrollment for a particular course should be directed to the academic division responsible for the course.

Challenging a Prerequisite or Corequisite:

A student has the right to challenge a prerequisite or on the basis of any one, or combination of, these conditions:

1. The prerequisite or corequisite has not been established in accordance with the College's Prerequisite Policy.
2. The prerequisite or corequisite is in violation of Title 5 (California Code of Regulations).
3. The prerequisite or corequisite is unlawfully discriminatory or is applied in an unlawfully discriminatory manner.
4. The student has the knowledge or ability to succeed in the course or program despite not meeting the prerequisite or corequisite.
5. The prerequisite or corequisite course has not been made reasonably available.
6. The student seeks to enroll in a course which involves intercollegiate competition or public performance and if denied admittance, he or she would be delayed by a semester or more in attaining his or her degree or certificate.
7. The student seeks to enroll in a course which has a prerequisite established to protect health and safety, and the student demonstrates that he or she does not pose a threat to himself or herself or to others.

A student should contact either the Counseling Division or the appropriate academic division office to obtain procedures and forms for filing a challenge.

Course Credit Codes

A "Credit, degree applicable" course is a course which has been designated as appropriate to the associate degree in accordance with the requirements of Title 5, Section 55002.

A "Credit, not degree applicable" course is a college course for which credit is granted but is not applicable to the associate degree.

A "Noncredit course" meets particular needs of a student but carries no college credit.

Course Transferability

The course transferability notation indicates if the course is transferable to the CSU and/or UC systems. For example, "Transfer CSU, UC" means a course is acceptable for admission eligibility purposes as a general education requirement or major requirement or for elective credit by the California State University and the University of California systems. If followed by an asterisk (UC*), there is a unit limitation on transferability. For details, see a counselor, the Transfer Center or the Articulation Officer. Students planning to transfer to a college or university should consult the transfer guide sheets available in Counseling Services, visit the Transfer Center, or view www.assist.org

El Camino College has arranged transferability of courses through articulation agreements with various private colleges and universities. For details, see a counselor, the Transfer Center or the Articulation Officer.

Course Descriptions

AS 1 - Individualized Academic Strategies

1 unit

3 hours lab per week to be arranged

This laboratory course emphasizes self-paced individualized instruction based on computerized diagnoses of difficulties in reading and/or mathematical computation. After diagnoses, individualized instructor-led and computer-based interventions are offered to improve reading or math skills.

Note: *Note: Pass/no pass only.*

(formerly Academic Strategies 1abcd)

AS 60 – Strategies for Success in Distance Education

1 unit

3 hour lecture

Credit, degree applicable

The goal of this course is to prepare students for taking distance education classes. This course covers the basics of taking an interactive, asynchronous distance education course via the internet or other computer-based systems. Use of email, online class interactions such as discussion groups, internet access, equipment needs and differences between online and onsite courses will be covered.

AJ 10 - Introduction to Homeland Security

3 units

3 hours lecture

Recommended Preparation: ENGL A

Credit, degree applicable

Transfer CSU

This course provides an overview of important components of homeland security, including various agencies and their interrelated responsibilities. Topics include historical events, critical threats, and legislative constraints that impact national security. The course clarifies the roles of military agencies and local, federal, and international law enforcement in combating terrorism and identifies characteristics, ideologies, motives, and behaviors of extremist groups that foster and support terrorist activities. Students will examine and interpret forensic evidence to reconstruct crimes of terrorism.

(formerly Administration of Justice 10ab)

AJ 11 - Intelligence and Security Management

3 units

3 hours lecture

Recommended Preparation: AJ 10 and ENGL A

Credit, degree applicable

Transfer CSU

This course provides an introduction to intelligence analysis and security management, focused on the prevention of terrorist attacks and other threats to national security. Students learn about the national defense system, including private sector defense, and explore the vulnerabilities of these systems. Students are exposed to the intelligence community, how it operates, and examines issues regarding intelligence support of the Department of Homeland Security.

AJ 12 - Transportation and Border Security Management

3 units

3 hours lecture

Recommended Preparation: AJ 11 and ENGL A

Credit, degree applicable

Transfer CSU

This course provides an overview of modern border and transportation security challenges. Different methods designed to address these challenges will be explored. The course covers a time period from post 9/11 to present. Topics associated with border security and security for transportation infrastructure include: ships, aircraft, railways, pipelines, and highways. Additional topics include technological solutions employed to enhance security of borders and transportation systems. Students will discuss the legal, economic, political, and cultural concerns as well as impacts associated with transportation and border security.

AJ 21 - Introduction to Emergency Management

3 units

3 hours lecture

Recommended Preparation: AJ 10 and ENGL A

Credit, degree applicable

Transfer CSU

This course introduces students to the fundamentals of emergency management. Students will learn the principles of emergency management, and will become familiar with the major issues confronting emergency management providers. The course will emphasize the elements of the Incident Command System. Students will participate in a series of simulated emergency management exercises. Case studies of large scale emergency events will be covered.

AJ 26 - Introduction to Terrorism and Counterterrorism

3 units

3 hours lecture

Recommended Preparation: AJ 11 and ENGL A

Credit, degree applicable

Transfer CSU

This course will provide students with an overview of domestic and transnational terrorism. Varying definitions, perspectives, and underlying causes will be explored along with terrorist weapons of choice. Terrorist and counterterrorist organizations will be examined, as well as incidents involving terrorist efforts, successes, and failures.

AJ 49 - Penal Code 832 - Arrest and Firearms

3 units

2.5 hours lecture, 1.5 hours lab per week to be arranged

Enrollment Limitation: Students must have a Department of Justice (DOJ) background clearance prior to enrolling in this course.

Recommended Preparation: ENGL 84

Credit, degree applicable

Transfer CSU

This course is designed to meet the minimum requirements for training as required by Penal Code Section 832. **It is** a standardized course and is certified by the California Commission on Peace Officer Standards and Training (P.O.S.T.). The course is approved by P.O.S.T. in the areas of leadership, laws of arrest, legal use of force, arrest and control methods (defensive tactics) and firearms training. It has fourteen individual topics called learning domains consisting of 38 hours of lecture covering twelve of the learning domains, 10 hours of training in defensive tactics and 24 hours in the safe manipulation of a pistol, for total of 72 hours. The course learning domains contain the minimum required foundational information that will enhance an individual's ability to gain employment in all law enforcement or allied agencies.

Note: Letter grade or pass/no pass option. Students pay fees for this course for Department of Justice background check and clearance, firing range, ammunition and targets.

AJ 95 - Cooperative Work Experience Education

2-4 units

hours to be arranged

Enrollment Limitation: Employment or volunteer work in a position related to the student's major or career goal by the second week of the semester. Completion of or current enrollment in one course from the major.

Credit, degree applicable

Transfer CSU*

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Administration of Justice field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

Note: Transfer limitations apply. The total units earned for Cooperative Work Experience Education may not exceed 16 units. (formerly Administration of Justice 95/96abcd)

AJ 99 - Independent Study

1-3 units

hours to be arranged

Enrollment Limitation: two courses in Administration of Justice with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work

Credit, degree applicable

Transfer CSU*

This course provides special advanced studies in a subject field of Administration of Justice not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Administration of Justice projects (54 hours per unit).

Note: Transfer limitations apply. For eligibility requirements, go to www.elcamino.edu/admissions/credit.asp (formerly Administration of Justice 99abc)

AJ 100 - Introduction to Administration of Justice

3 units

3 hours lecture

Recommended Preparation: ENGL A

Credit, degree applicable

Transfer CSU, UC

This course introduces students to the characteristics of the criminal justice system in the United States. Focus is placed on examining crime measurement, theoretical explanations of crime, responses to crime, components of the system, and current challenges to the system. The course examines the evolution of the principles and approaches utilized by the justice system and the evolving forces which have shaped those principles and approaches. Although justice structure and process are examined in a cross context, emphasis is placed on the United States justice system, particularly the structure and function of police, courts, and corrections. Students are introduced to the origins and development of criminal law, legal process, sentencing, and incarceration policies.

AJ 103 - Concepts of Criminal Law I

3 units

3 hours lecture

Recommended Preparation: ENGL A

Credit, degree applicable

Transfer CSU, UC*

In this course, students examine the historical development and philosophy of law and its application to the criminal justice system. Topics covered include legal research, case law, classifications of crime, crimes against persons and property, and crimes against the state.

Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

AJ 106 - Criminal Justice Career Preparation

3 units

3 hours lecture

Recommended Preparation: ENGL 84

Credit, degree applicable

Transfer CSU

This course prepares students interested in a career in the Criminal Justice system to successfully navigate the highly competitive hiring process. Topics covered include how to successfully complete the initial application, written examination, oral interview, polygraph examination, physical agility test, background investigation and the written/oral psychological examinations.

AJ 107 - Crime and Control - An Introduction to Corrections

3 units

3 hours lecture

Recommended Preparation: ENGL A

Credit, degree applicable

Transfer CSU

This is a basic course covering crime, criminal behavior and social attempts at controlling such behavior. Emphasis in this course is placed on traditional types of punishment, such as incarceration, as well as rehabilitation, probation, parole and diversion. Incarceration issues include officer and inmate safety, physical security aspects of prison, inmate discipline and code of conduct. Rehabilitation topics include education, job skills training and parole. This course covers the basic career skills and knowledge required for employment as detention officers in custodial institutions, probation and parole.

AJ 109 - Introduction to Police Patrol Procedures

3 units

3 hours lecture

Recommended Preparation: ENGL A

Credit, degree applicable

Transfer CSU

This course covers the study of the history and development of police patrol. Topics covered include functions of patrol, investigative duties of the field officer, techniques for planning patrol activities, handling complaints and requests for service, field interviews, searches, seizure and arrests, civil and domestic disturbances, and the handling of traffic related problems.

AJ 111 - Criminal Investigation

3 units

3 hours lecture

Recommended Preparation: AJ 109 and ENGL A

Credit, degree applicable

Transfer CSU

This course covers the fundamentals of criminal investigation. Topics include the techniques of crime scene search and recording, collection and preservation of physical evidence, modus operandi processes, sources of information, interview and interrogation, and follow-up investigation.

AJ 115 - Community and Human Relations

3 units

3 hours lecture

Recommended Preparation: ENGL A

Credit, degree applicable

Transfer CSU, UC

This course examines the complex, dynamic relationship between communities and the justice system in addressing crime and conflict with an emphasis on the challenges and prospects of administering justice within a diverse multicultural population. Topics include the shared and conflicting values in culture, religion, and law.

AJ 126 - Juvenile Delinquency and Legal Procedures

3 units

3 hours lecture

Recommended Preparation: ENGL A

Credit, degree applicable

Transfer CSU

This course is an examination of the origin, development, and organization of the juvenile system as it evolved in the American justice system. The course explores the theories that focus on juvenile law, courts and processes, and the constitutional protections extended to juveniles administered in the American justice system.

AJ 130 - Criminal Procedures

3 units

3 hours lecture

Recommended Preparation: ENGL A

Credit, degree applicable

Transfer CSU

This course is an in-depth study of the procedures by which a criminal defendant is tried. As enumerated by the Constitution's due process clauses of the Fifth and Fourteenth Amendments, this course examines how this process functions from the point at which a crime is committed to arrest, trial and appeal.

AJ 131 - Legal Aspects of Evidence

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL A

Credit, degree applicable

Transfer CSU

This course covers the legal aspects evidence and the constitutional and procedural considerations affecting arrest, and search and seizure. Topics covered include types of evidence and rules governing their admissibility, judicial decisions interpreting individual rights, and case studies viewed with respect to how they are applied in a criminal process from arrest to trial.

AJ 132 - Forensic Crime Scene Investigation

3 units
3 hours lecture
Credit, degree applicable
Transfer CSU

This course provides students with an introduction to forensic crime scene investigation (CSI). It examines the methods utilized in the forensic analysis of crime scenes, pattern evidence, instruments, firearms, questioned documents and controlled substances. Topics covered will include the workings of a CSI unit, an overview of the relationship between forensic science and law enforcement, as well as evidence collection and analysis rules.

AJ 133 - Fingerprint Classification and Investigation

3 units
3 hours lecture
Credit, degree applicable
Transfer CSU

This course covers the basic principles of fingerprints, including lifting, classification, and identification. The history and scientific basis for fingerprints are studied in relation to current practices and procedures.

AJ 134 - Introduction to Crime Analysis

3 units
3 hours lecture
Recommended Preparation: ENGL A
Credit, degree applicable
Transfer CSU

This course is designed to develop basic crime analysis skills needed in today's law enforcement environment. Students will analyze data and transform their analyses into specific and proactive plans to combat crime-related problems. The course prepares law enforcement professionals, both sworn and civilian, who are integrally involved in community-based policing programs, which respond to a community's quality-of-life issues.

AJ 135 - Report Writing

3 units
3 hours lecture
Recommended Preparation: AJ 103 and ENGL A
Credit, degree applicable
Transfer CSU

In this course, students develop the ability to observe, record and document facts from which a police or criminal justice report could be written. Facts presented are based on simulated crimes that include crime scenes with evidence and witness statements. Students complete a variety of law enforcement report forms and construct police report narratives using proper spelling, grammar and sentence structure in a manner that satisfies typical requirements for a criminal investigation or prosecution.

AJ 142 - Introduction to Digital Evidence

3 units
3 hours lecture
Recommended Preparation: AJ 100 and ENGL A
Credit, degree applicable
Transfer CSU

This course provides students with an understanding of digital crime scene investigation. Topics include court presentation of evidence requirements involving digital forensic evidence, digital imaging, and metadata. Recognized legal and professional standards will be reviewed. Students will be exposed to contemporary digital forensic tools and processes used in collecting digital evidence from seizure to the admission as evidence in a criminal trial. Procedural and legal issues in the handling, processing, and examination of digital evidence will be studied. Students will learn about methods of handling the chain of custody regarding some digital evidence, and discovery procedures.

AJ 150 - Peace Officer Training Module - Level III

7 units

5.5 hours lecture, 3.5 hours lab per week to be arranged

Enrollment Limitation:

1. Current medical examination conducted within 6 months (for safety and liability reasons).
2. Students must apply for and receive a California Department of Justice Firearms and Arrest Clearance (Penal Code Section 13511.5).
3. Possession of a valid California driver's license. Copy of a current DMV printout will be requested.

Credit, degree applicable

Transfer CSU

This course is designed for California Commission on Peace Officer Standards and Training (P.O.S.T.) certified Training Module - Level III peace officer training candidates. A Level III peace officer may perform specified limited support duties that are not likely to result in physical arrests. The student will participate in a 162 hour course of instruction and training emphasizing basic law enforcement philosophy, procedures, tactics, and techniques. The course is certified pursuant to California Penal Code Section 830.6(a)(1) and 832.6(a)(3).

AJ 155 - Peace Officer Training Module - Level II

10 units

9 hours lecture, 3.5 hours lab per week to be arranged

Prerequisite: Possession of a current Commission on Peace Officer Standards and Training (P.O.S.T.) Level III certificate

Enrollment Limitation: 1. Current medical examination conducted within 6 months (for safety and liability reasons).

2. Current California Department of Justice Firearms and Arrest Clearance obtained within 6 months (Penal Code Section 13511.5).
3. Possession of a valid California driver's license. Copy of a current DMV printout will be requested.

Credit, degree applicable

Transfer CSU

This course is designed for California Commission on Peace Officer Standards and Training (P.O.S.T.) Certified Training Module - Level II peace officer training candidates. A Level II reserve officer may perform general law enforcement assignments while under the immediate supervision of a peace officer. These officers may also work assignments authorized for Level III reserve officers.

Note: The student will participate in a 225 hour course of instruction and training emphasizing basic law enforcement philosophy, procedures, tactics, and techniques. The course is certified pursuant to California Penal Code Section 830.6(a)(1) and 832.6(a)(2). Students pay mandatory fees for Department of Justice background check and clearance, firing range, ammunition and targets, physical training clothing, and physical examination fees.

AJ 170 - Constitutional Law for Criminal Justice

3 units

3 hours lecture

Recommended Preparation: ENGL A

Credit, degree applicable

Transfer CSU

In this course, students examine the history and development of the United States Constitution and related case law decisions. Emphasis is given to the application of the Constitution as it relates to the administration of justice including free speech, free assembly, use of force, laws of arrest, search, seizure, right to counsel, and due process.

AJ 190 - Law Enforcement Explorer Academy

3 units

2.5 hours lecture, 1.5 hours lab

Enrollment Limitation: Medical examination (current within last 6 months)

Credit, not degree applicable

This course is designed to expose the student to the many facets of law enforcement. Instructional activities will emphasize career exploration, law enforcement history and organization, professionalism, teamwork, drill and ceremony, Cardiopulmonary Resuscitation (CPR), and firearm safety. Upon successful completion of the course, a student will be eligible to become a member of a local Police Department Explorer Post.

Note: This course is available to students from the age of 14 to 20. Enrollment in this course requires concurrent participation and prior acceptance into one of the six participating Police Explorer Youth Programs (Hawthorne, Santa Monica, Torrance, Manhattan Beach, Gardena, or Inglewood Police Departments) in this region. After the student has completed a law enforcement explorer application with one of the police agencies, the student will be prepared to enroll in this course.

ACR 5 - Electrical Applications

4 units

3 hours lecture, 3 hours lab

Recommended Preparation: ACR 21

Credit, degree applicable

Transfer CSU

The course focuses on basic electrical theory and training in installing, servicing, troubleshooting, and operating electrical control systems for air conditioning and refrigeration technology with the use of electrical diagrams. Single phase and three phase electrical power for air conditioning and refrigeration systems are covered in classroom discussions and laboratory assignments.

ACR 6 - Refrigeration and Air Conditioning Control Systems

4 units

3 hours lecture, 3 hours lab

Prerequisite: ACR 5 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

This course explores control system theory, electrical components, and complex control systems with emphasis on supervisory control systems which employ direct digital, proportional and integral control modes and theoretical faults. The course provides the foundational skills required to analyze and service basic circuits as well as complex analog control circuitry.

ACR 21 - Air Conditioning Fundamentals

4 units

3 hours lecture, 3 hours lab

Credit, degree applicable

Transfer CSU

This course is designed to introduce students to air conditioning and refrigeration theory and provide an overview of the skills needed for employment in the industry. Topics introduced include safety, air conditioning system operation and components, brazing, electrical applications, service tools, and equipment.

ACR 23 - Commercial Refrigeration Applications

4 units

3 hours lecture, 3 hours lab

Prerequisite: ACR 21 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

This course explores refrigeration theory, characteristics of refrigerants, temperature and pressure, tools and equipment, soldering, brazing, commercial refrigeration systems, system components, compressors, evaporators, and metering devices. Students will learn to charge commercial systems with new Environmental Protection Agency (EPA) refrigerants and evaluate the proper operation of systems. Troubleshooting techniques are explained with the use of wiring diagrams and electric meters. Students will learn to service and troubleshoot commercial refrigeration ice machines, coolers, walk-ins, refrigerators, and freezers. Students will be introduced to a variety of commercial refrigeration systems and components.

ACR 25 - Energy Efficient Residential, Commercial and Industrial Air Conditioning

4 units

3 hours lecture, 3 hours lab

Prerequisite: ACR 21 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

This course covers energy efficient green technology (high efficiency), advanced residential, commercial and industrial air conditioning. Labs include the use of air conditioning test equipment, installation, repair and maintenance of various types of air conditioning systems. Topics include various techniques of troubleshooting electrical and mechanical problems; equipment operational efficiencies and building envelope condition performing indoor air-quality and system efficiency testing; and system airflow and operational efficiencies.

ACR 27 - Heating Technologies

4 units

3 hours lecture, 3 hours lab

Prerequisite: ACR 21 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

This course covers the principles of gas, electric, radiant and boiler operated heating systems. Classroom discussions focus on maintenance, repair and service techniques for furnaces, steam and hot water boilers. Laboratory exercises emphasize the use of test instruments and safety controls.

ACR 30 - Electric Controls

2 units

2 hours lecture

Prerequisite: ACR 21 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

This course covers the study of electrical and electronic components, motors, and circuitry for air conditioning and refrigeration controls. Students apply theoretical principles in diagnosing electrical and electronic problems and safely make necessary repairs to refrigeration, heating, ventilating and air conditioning (HVAC) systems. Energy efficiency practices and process related to electronic and electronic controls is the focus of this course.

ACR 31 - HVAC Electronics

2 units

2 hours lecture

Prerequisite: ACR 5 with a minimum grade of C or equivalent and ACR 21

Credit, degree applicable

Transfer CSU

In this course, the fundamentals of Direct Digital Controls (DDC) used in Heating, Ventilation, Air Conditioning and Refrigeration (HVACR) systems are presented. The topics covered include DDC system components, single and multi-function electronic controls, DDC and pneumatic Variable Air Volume (VAV) systems, variable speed motors, controllers, programmable and configurable logic controller operation and application, introduction to communication protocols, and electronic diagram interpretation.

ACR 34 - HVAC Customer Service and Industry Certifications

1 unit

1 hour lecture

Recommended Preparation: ACR 21

Credit, degree applicable

Transfer CSU

This is a course in Heating, Ventilation, and Air Conditioning (HVAC) customer service, Environmental Protection Agency (EPA) Section 608 and Section 609 Technician Certifications, and North American Technician Excellence (NATE) Certification. Topics include communication skills, problem solving, interview skills, refrigerant recovery and recycling, laws, regulations, and energy efficiency. Students learn vital workplace skills through designed exercises as well as how employers evaluate these skills. Students can prepare for universal EPA and NATE certification.

ACR 61 - Fundamentals of Automation Systems

3 units

3 hours lecture

Recommended Preparation: ACR 21 or ACR 31

Credit, degree applicable

Transfer CSU

This course is an introduction to the fundamentals of automation, commissioning, re-commissioning, retro-commissioning, installation, service and troubleshooting of mechanical, electrical, and Direct Digital Control (DDC) systems for the Heating, Ventilation, Air-Conditioning, and Refrigeration (HVACR) industry. This course includes a review of automation system communication protocols and unit supervisory level programming.

ACR 62 - Energy Control and Optimization Systems

4 units

3 hours lecture, 3 hours lab

Prerequisite: ACR 61 with a minimum grade of C

Credit, degree applicable

Transfer CSU

In this course, students will apply knowledge gained to develop, plan, direct, implement, optimize, and sustain system energy efficiency and control in single and multi-site locations. Course topics include direct digital controls, programmable controls, configurable controllers, multi-zone systems, communication protocols, control system commissioning, logic circuits, object and property program structure, and interoperability.

ACR 95 - Cooperative Work Experience Education

2-4 units

hours to be arranged

Enrollment Limitation: Employment or volunteer work in a position related to the student's major or career goal by the second week of the semester. Completion of or current enrollment in one course from the major.

Credit, degree applicable

Transfer CSU*

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Air Conditioning and Refrigeration field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

Note: *Transfer limitations apply.

The total units earned for Cooperative Work Experience Education may not exceed 16 units.

(formerly Air Conditioning and Refrigeration 95abcd)

ACR 99 - Independent Study

1-3 units

hours to be arranged

Enrollment Limitation: two courses in Air Conditioning and Refrigeration with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work

Credit, degree applicable

Transfer CSU*

This course provides special advanced studies in a subject field of Air Conditioning and Refrigeration not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Air Conditioning and Refrigeration projects (54 hours per unit).

Note: *Transfer limitations apply.

For eligibility requirements, go to www.elcamino.edu/admissions/credit.asp

(formerly Air Conditioning and Refrigeration 99abc)

ASTU 7 - History of American Popular Culture

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This interdisciplinary course examines how popular culture contributes to the search for meaning in everyday American life. Various forms of popular culture including music, film, television, advertising, sports, fashion, design, toys, magazines, comic books, and cyber culture will be analyzed. Students will assess how American popular culture reveals historical forces at work that influence our lives.

ANAT 30 - Essentials of Anatomy and Physiology

4 units

2 hours lecture, 6 hours lab

Recommended Preparation: ENGL 84

Credit, degree applicable

Transfer CSU, UC*

This course is the study of anatomy coupled with physiology. Students compare the structure and function of human organ systems to those of other vertebrates. The laboratory includes dissection of sheep brains and hearts, cow eyes and other vertebrates. Laboratory experiments reinforce principles of anatomy and the basic principles of chemistry, cell biology, histology, embryology, and genetics.

Note: This course may satisfy the anatomy requirements for other health-related programs. It does not satisfy the requirements for the Bachelor of Science in Nursing. The maximum UC credit allowed for students completing Anatomy 30, ANAT 32, and PHYO 31 is two courses.

ANAT 32 - General Human Anatomy

4 units

2 hours lecture, 6 hours lab

Recommended Preparation: ANAT 30 or BIOL 10 ENGL 84

Credit, degree applicable

Transfer CSU, UC*

This in-depth course covers all eleven systems of the human body including related histology and pathology. The systems covered are skeletal, muscular, nervous, integument, respiratory, digestive, reproductive, urinary, endocrine, immune, and lymphatic. Models of the human body and dissection of higher vertebrates are emphasized in laboratory. This course is designed for science, health-related, pre-nursing (Bachelor of Science in nursing), and pre-professional majors.

Note: The maximum UC credit allowed for students completing ANAT 30, Anatomy 32, and PHYO 31 is two courses.

APHY 34A - Anatomy and Physiology I

4 units

3 hours lecture, 5 hours lab

Prerequisite: CHEM 4 or CHEM 20, or CHEM 21A with a minimum grade of C or equivalent or concurrent enrollment

Credit, degree applicable

Transfer CSU, UC

This is the first semester of the two-semester Anatomy and Physiology lecture and lab course. It is an indepth course examining major organ systems, their morphology and functions as well as some of their common pathologies. Topics include an introduction to the human body, chemical and biochemical principles, cell morphology and function, cell division, genetics and histology. In the first semester, the students study the integumentary, skeletal, and muscular systems, as well as the first half of the nervous system. Laboratory investigations include models of the human body and dissection of higher vertebrates, in addition to physiological experiments. The course is designed for science, health-related, pre-nursing (Bachelor of Science in Nursing), and pre-professional majors.

APHY 34B - Anatomy and Physiology II

4 units

3 hours lecture, 5 hours lab

Prerequisite: APHY 34A

Credit, degree applicable

Transfer CSU, UC

This is the second semester of the two-semester Anatomy and Physiology lecture and lab course that includes computer assisted learning and lab simulation. Topics examined in-depth include: special senses, autonomic nervous system, endocrine system, cardiovascular system, lymphatic system and immunity, respiratory system, digestive system and nutrition, cellular respiration, urinary system, fluid, electrolyte, and acid-base balance, reproductive system, genetic conditions and disorders, embryology and development. Laboratory investigations include models of the human body and dissection of higher vertebrates, in addition to physiological experiments. The course is designed for science, health-related, pre-nursing (Bachelor of Science in Nursing), and pre-professional majors.

ANTH 1 - Introduction to Physical Anthropology

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course explores and emphasizes the evolution and biological diversity of the human species and our closest living relative, the non-human primates. Topics include genetics, mechanisms of evolutionary change, human variation, and the reconstruction of human evolutionary history through examination of the fossil record.

ANTH 2 - Introduction to Cultural Anthropology

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course will provide students with an introduction to culture theory as well as to the cross-cultural understanding of human behavior. Emphasis will be placed on subsistence strategies marriage and kinship institutions levels of sociopolitical organization religious systems and the effects of cultural change, mainly as the result of European expansion, industrialization, and globalization.

ANTH 3 - Introduction to Archaeology

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course is a survey of the field of archaeology in the United States and abroad. It traces the history of archaeology and reviews the concepts, topics of concern, and research methodologies commonly encountered within the field of archaeology. Students will be introduced to basic techniques of soils analysis and archaeological materials analysis.

ANTH 4 - Language and Culture

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course introduces students to the anthropological study of language. Using a cross-cultural perspective, students will examine the relationship between culture and the ways in which humans communicate. Topics include language acquisition, structure, diversity, and change. The social and non-verbal aspects of language will also be explored.

ANTH 5 - Physical Anthropology Laboratory

1 unit

3 hours lab

Prerequisite: ANTH 1 with a minimum grade of C or concurrent enrollment

Credit, degree applicable

Transfer CSU, UC

This course uses laboratory exercises and hands-on activities to explore the primary topics of physical anthropology. Topics will include principles of evolution, human genetics, forensic anthropology, behavior and anatomy of nonhuman primates, human variation, and fossil evidence for human evolution.

ANTH 6 - Native Peoples of North America

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course is designed to provide an understanding of the origins, culture areas, and culture characteristics of native peoples north of Mexico. Topics include the prehistory of these aboriginal New World populations, cultural adaptations to various environments, and interactions with non-natives during and following the period of European expansion.

ANTH 7 - Native Peoples of South America

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course focuses on the study of the native peoples of South America. Special emphasis is placed on the understanding of the relationship between the environmental zones of South America and the social, economic, political, and religious institutions of indigenous societies. The current conditions of South American indigenous groups, most often as the result of colonialist policies which include globalization and modernization, are also examined.

ANTH 8 - Ancient Civilizations of Mesoamerica

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course traces the development of the indigenous societies of this region from the entry of humans into the Americas at the end of the Upper Paleolithic until the invasion of the Spaniards in the early sixteenth century. Special attention will be given to those societies that achieved chiefdom or state-level political complexity. Topics will include the languages, writing systems, belief systems, political systems, economies, monuments and art of these peoples.

ANTH 9 - Women, Culture, and Society

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course is a cross-cultural survey of women's experiences in various types of societies including band, tribal, chiefdom and state level societies. Topics will include women's roles in subsistence strategies, economics, kinship, marriage and the family, political organization, religion and expressive culture, as well as the cross-cultural social dynamics between men and women. The changing status of women in diverse cultures, the impact of biology and culture on sex roles, and alternate gender categories found in traditional societies will also be examined.

ANTH 11 - Anthropology of Religion, Magic and Witchcraft

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course is a cross-cultural and evolutionary survey of the supernatural. It includes an examination of magic and witchcraft practices and the different functions they play in various world societies including hunting and gathering groups, and tribal level and state level societies. Religious beliefs, symbolism and ritual are explained from an anthropological perspective.

ARCH 95 - Cooperative Work Experience Education

2-4 units

hours to be arranged

Enrollment Limitation: Employment or volunteer work in a position related to the student's major or career goal by the second week of the semester. Completion of or current enrollment in one course from the major.

Credit, degree applicable

Transfer CSU*

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Architecture field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

Note: *Transfer limitations apply. The total units earned for Cooperative Work Experience Education may not exceed 16 units. (formerly Architecture 96abcd)

ARCH 99 - Independent Study

1-3 units

hours to be arranged

Enrollment Limitation: two courses in Architecture with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work

Credit, degree applicable

Transfer CSU*

This course provides special advanced studies in a subject field of Architecture not covered in the regular departmental offerings. Regular conferences with instructor are coordinated with assigned Architecture projects (54 hours per unit).

Note: *Transfer limitations apply. For eligibility requirements, go to www.elcamino.edu/admissions/credit.asp. (formerly Architecture 99abc)

ARCH 100 - An Orientation to Architecture

1 unit

1 hour lecture

Recommended Preparation: ENGL A

Credit, degree applicable

Transfer CSU

This course is an orientation to architecture for the beginning student. The student will be taught how to create architecture, how to understand architecture, and how it shapes the social and urban environment. Education, career opportunities and options will be discussed.

ARCH 104 - History of Western Architecture

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 84

Credit, degree applicable

Transfer CSU, UC

In this course students are introduced to the architecture of both ancient and recent cultures. Buildings from antiquity to the present day will be studied, analyzed, and interpreted in terms of their religious, social, and political context. Particular emphasis will be placed on the process and sources of design and the purposes and types of buildings.

ARCH 107 - World Architecture: Pre-History to Middle Ages

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL A

Credit, degree applicable

In this course, students are introduced to the architecture from the pre-history through the middle ages. Structures from pre-history to the early middle ages will be studied, analyzed, and interpreted in terms of their architectural characteristics and their religious, social and political context

ARCH 108 - World Architecture: Gothic to Early Modern

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL A

Credit, degree applicable

In this course, students are introduced to the architecture from the Italian Renaissance through the Contemporary Architecture. Buildings from late 12th through the 21st centuries will be studied, analyzed and interpreted in terms of their religious, social, economic and political context.

ARCH 119 - Computer Aided Architectural Drafting

3 units

2 hours lecture, 4 hours lab

Prerequisite: ARCH 150A with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

This is a beginning course in the study of Computer Aided Drafting (CAD) with regard to Architecture. Students learn the commands necessary to produce construction documents for a building using the latest version of the AutoCAD Software.

(formerly Architecture 120abcd)

ARCH 121 - Building Information Modeling I

3 units

2 hours lecture, 4 hours lab

Recommended Preparation: ARCH 119

Credit, degree applicable

Transfer CSU

This introductory course in Building Information Modeling (BIM) uses parametric building modeling software to create intelligent, three-dimensional (3D) computer models of buildings and their components. Students will create a complete set of construction documents of a commercial building complete with floor plans, building sections, elevations, details, schedules and 3D views using BIM techniques.

(formerly Architecture 121abcd)

ARCH 125 - Building Information Modeling II

3 units

2 hours lecture, 4 hours lab

Recommended Preparation: ARCH 121

Credit, degree applicable

Transfer CSU

This course teaches intermediate techniques in Building Information Modeling (BIM) using various architectural computer aided design (CAD) software including Autodesk Revit. Topics include computer animation, rendering, design analysis and documentation of buildings. Students will create detailed computer models of buildings and generate floor plans, building sections, elevations, details and schedules from the model.

(formerly Architecture 125abcd)

ARCH 150A - Construction Documentation I

3 units

2 hours lecture, 4 hours lab

Credit, degree applicable

Transfer CSU

This course is an introduction to construction document development. Building codes and zoning codes will be introduced along with the functions of framing members in wood and steel frame construction (Type V). Manual hand drafting techniques, sketching, Computer Aided Drafting (CAD) and Building Information Modeling (BIM) skills will be utilized in developing construction documents.

ARCH 150B - Construction Documentation II

3 units

2 hours lecture, 4 hours lab

Prerequisite: ARCH 150A with a minimum grade of C or equivalent

Recommended Preparation: ARCH 119 or equivalent architectural AutoCAD skills

Credit, degree applicable

Transfer CSU

This course is an advanced-level construction document development class. Current zoning and building codes will be explored to understand the design impact on the project design including Green Building Code and Net Zero. Sketching techniques, Computer Aided Design (CAD) and Building Information Modeling (BIM) skills will be developed to create construction documents.

ARCH 158 - Structures Analysis - Timber

3 units

3 hours lecture

Credit, degree applicable

Transfer CSU

In this course, students are introduced to the analysis of structural components in residential buildings. Topics covered include vertical and horizontal loadings, shear and moment diagrams, wood, laminated wood and steel beams, wood and steel columns, foundation sizing, and lateral bracing systems.

ARCH 170 - Architectural Graphics Techniques

3 units
2 hours lecture, 4 hours lab
Credit, degree applicable
Transfer CSU

This introductory course acquaints the beginning student with the range of graphic tools which are available for conveying architectural ideas. Various graphic conventions and techniques will be presented and the rationale behind their use explained.

ARCH 171 - Architectural Three-Dimensional Illustration

3 units
2 hours lecture, 4 hours lab
Credit, degree applicable
Transfer CSU

This is a course in three-dimensional pictorial drawing that covers one, two and three point perspectives. Basic methods of construction are used in producing these drawings. Special attention is given to shortcut methods used by professionals. The use of shade and shadow, reflections and mirror images are also covered.

ARCH 172 - Architectural Color Rendering Techniques

3 units
2 hours lecture, 4 hours lab
Credit, degree applicable
Transfer CSU

This course is the study of rendering techniques used by illustrators to delineate architectural drawings. Topics include color theory and hue schemes. Both manual and computer graphic techniques will be covered.

ARCH 179 - Design/Build Studio

4 units
2 hours lecture, 6 hours lab
Prerequisite: ARCH 199 and ET 165 with a minimum grade of C in prerequisite or equivalent
Credit, degree applicable
Transfer CSU

This course is a multi-disciplinary design studio that introduces students to the building design and construction process. Team collaboration will be stressed from the generation of the building design through the fabrication of the structure.

(formerly Architecture 180abcd)

ARCH 199 - Architecture Design Studio

4 units
2 hours lecture, 6 hours lab
Credit, degree applicable
Transfer CSU

In this course, students learn design theory and how to balance the constraints that architects face when solving building design problems. Students will design and compose two and three dimensional drawings as well as build models to demonstrate their solutions.

(formerly Architecture 199abcd)

ART 96 - Cooperative Work Experience Education

2-4 units
hours to be arranged
Enrollment Limitation: Employment or volunteer work in a position related to the student's major or career goal by the second week of the semester. Completion of or current enrollment in one course from the major.
Credit, degree applicable
Transfer CSU*

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Art field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

Note: *Transfer limitations apply. The total units earned for Cooperative Work Experience Education may not exceed 16 units.
(formerly Art 96abcd)

ART 99 - Independent Study

1-3 units

hours to be arranged

Enrollment Limitation: two courses in Art with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work

Credit, degree applicable

Transfer CSU*

This course provides special advanced studies in a subject field of Art not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Art projects (54 hours per unit).

Note: *Transfer limitations apply. For eligibility requirements, go to www.elcamino.edu/admissions/credit.asp. (formerly Art 99abc)

ART 101 - Art and Visual Culture: A Global Perspective

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course is an introduction to art and visual culture across time and diverse cultures with a global perspective. Examining works of art through themes, theory, terminology and media, students acquire analytical and interpretive skills to develop visual literacy as well as an understanding of the role of art and visual culture in relation to contemporary life. This course explores how meaning is constructed, transmitted and negotiated in an increasingly visual world.

(formerly Art 1)

ART 102A - History of Western Art - Prehistoric to Gothic

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course surveys the history of Western art from the prehistoric era through the Gothic period with an emphasis on painting, sculpture, and architecture. Key art works are studied in relation to historical and cultural contexts that consider the effects of shifting social, political, philosophical, and spiritual paradigms on the production of art.

(formerly Art 2)

ART 102AH - Honors History of Western Art - Prehistoric to Gothic

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This course, designed for students in the Honors Transfer Program, surveys the history of Western art from the prehistoric era through the Gothic period with an emphasis on the relation of artworks to historical and cultural contexts by examining the effects of shifting social, political, philosophical, and spiritual paradigms on the production of art. This course is enriched through more extensive reading, writing, and research assignments.

ART 102B - History of Western Art - Proto-Renaissance to 19th Century

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course surveys the history and development of Western painting, sculpture, and architecture in relation to changing social, political, religious, and philosophical conditions from the 14th through the 19th centuries. The focus is on the Proto-Renaissance, Renaissance, Mannerism, and Baroque periods in Italy, Spain, Flanders, The Netherlands, France, England, Germany and the New World.

(formerly Art 3)

ART 102C - History of Western Art - 19th Century to Contemporary Times

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course is a survey of the history, development, and evolution of painting, sculpture, architecture, photography, and related art forms of Western Europe and the United States from the mid-nineteenth century to the late-twentieth century. Artworks, art movements, and art styles are studied in relation to relevant social, political, philosophical, and technological factors, and the accelerating changes that characterize the modern era. Students will see how the aesthetic of newness, originality, anti-academicism, and radical formal invention characteristic of avant-garde modernism was rooted in the deep-seated social changes and values that defined modernity. Students will be introduced to fundamental methods of analysis that will assist them in understanding art and aesthetic human activities.

(formerly Art 4)

ART 106 - Cross-Cultural Art

3 units

3 hours lecture

Recommended Preparation: ENGL 82

Credit, degree applicable

Transfer CSU, UC

This course covers the effects of cultural diffusion, cultural pluralism, and globalization on Western civilization as found in modern and contemporary art and popular culture. Topics include Orientalism, Japonisme, and Primitivism as well as postmodern multiculturalism.

(formerly Art 6)

ART 109 - Contemporary Art in World Cultures

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

In this global survey of contemporary art, students study recent works by artists from different geographical and cultural regions of the world. Emphasis is placed on artworks that reflect changes to world cultures resulting from colonization, war, and globalization and that capture the interconnections among world cultures and individuals from a humanistic perspective. Using a comparative and transnational framework, students identify commonalities and differences in the way diverse cultures and individuals are affected by and respond to global change.

ART 110 - Drawing Fundamentals I

3 units

2 hours lecture, 4 hours lab

Credit, degree applicable

Transfer CSU, UC

This course is an introduction to the techniques, media, and concepts of drawing. Instruction is designed to foster observational, compositional, interpretive, and expressive proficiencies. Representative topics include observation, perception, and the drawing process; contour and line; value, volume, and light theory; composition and pictorial structure; and linear perspective.

(formerly Art 10ab)

ART 129 - Fundamentals of Color

3 units

2 hours lecture, 4 hours lab

Credit, degree applicable

Transfer CSU, UC

This course is an introduction to the history, theory, and application of color. Students will create various designs, diagrams, and art works. Creative problem-solving in art and design is also emphasized.

(formerly Art 29ab)

ART 130 - Two-Dimensional Design I

3 units
2 hours lecture, 4 hours lab
Credit, degree applicable
Transfer CSU, UC

This course introduces the elements and principles of two-dimensional design and provides instruction in the fundamentals of graphic communication including visual perception, color structure, composition, and expression.

(formerly Art 37ab)

ART 131 - Lettering and Typography I

3 units
2 hours lecture, 4 hours lab
Credit, degree applicable
Transfer CSU, UC

This course provides a foundation in typography for students interested in graphic design and digital arts. The use of lettering and typography in printed publications, advertising, web design, and motion graphics will be explored. Students will create typographic designs for both page and screen layout.

(formerly Art 41ab)

ART 132 - Advertising Design I

3 units
2 hours lecture, 4 hours lab
Recommended Preparation: ART 131 or ART 141
Credit, degree applicable
Transfer CSU

This course presents a fundamental overview of advertising design and stresses creative problem solving. Topics such as marketing, demographic studies, client-agency relationships and American advertising are covered. Through the synthesis and application of design principles and elements, research and layout methods, and production and printing processes, individual projects will be completed representing various types of advertising: magazine, newspaper, broadcast, outdoor, product, and in-store.

(formerly Art 39ab)

ART 133 - Graphic Design

3 units
2 hours lecture, 4 hours lab
Recommended Preparation: ART 131 or ART 141
Credit, degree applicable
Transfer CSU, UC

This course is an introduction to the concepts and processes of graphic design. Emphasis is placed on the application of raster, vector graphics, and page layout software, as well as traditional art and design media. Problem-solving skills and the creative design process are emphasized through digital imaging, typography, identify design and page layout.

(formerly Art 43abcd)

ART 141 - Digital Art Fundamentals

3 units
2 hours lecture, 4 hours lab
Recommended Preparation: ART 110 or ART 130 with a minimum grade of C ENGL 82 Business 52A or equivalent computer skills
Credit, degree applicable
Transfer CSU, UC

This course provides students with a foundation in the two basic types of graphics software, vector (drawing) and raster (painting/photography). Topics include integration of traditional design, color, and compositional principles with contemporary digital tools. Students will work on a variety of digital projects involving drawing, design, typography, photographic manipulation, and animation.

(formerly Art 141abcd)

ART 142 - Digital Imaging Fundamentals

3 units

2 hours lecture, 4 hours lab

Recommended Preparation: ART 150 or PHOT 150 and PHOT 101

Credit, degree applicable

Transfer CSU, UC*

This course is an introduction to the processes, principles, and tools of digital imaging. Topics include the development of technical and aesthetic skills, elements of design and composition, overview of digital camera technology, digital photography software, image manipulation, and contemporary trends in photography.

Note: The maximum UC credit allowed for students completing Art 142 is 3 units.
(formerly Art 142abcd)

ART 143 - Digital Publishing Fundamentals

3 units

2 hours lecture, 4 hours lab

Recommended Preparation: ART 131 or ART 141

Credit, degree applicable

Transfer CSU

This course is an introduction to fundamental concepts and practices of digital publishing for print and screen. Topics include integration of typography, color, images, and graphic design principles with contemporary digital tools. Students work on both individual and group projects.

(formerly Art 143abcd)

ART 144 - 3D Modeling and Animation

3 units

2 hours lecture, 4 hours lab

Prerequisite: ART 141 with a minimum grade of C

Recommended Preparation: ART 110

Credit, degree applicable

Transfer CSU

This course is an introduction to the concepts and techniques of digital three-dimensional (3D) modeling and animation. Students will receive hands-on experience with 3D software to create digital models, environments, characters, and animations.

(formerly Art 144abcd)

ART 145 - Web Animation and Games

3 units

2 hours lecture, 4 hours lab

Prerequisite: ART 141 with a minimum grade of C

Recommended Preparation: ART 146

Credit, degree applicable

Transfer CSU, UC

This course teaches the student to create two-dimensional animations and design interactive games for the Web and hand-held devices. Exercises and projects lead students through the principles of animation, gaming design, typography, screen and interface design, digital sound, and digital video.

(formerly Art 145abcd)

ART 146 - Designing for the World Wide Web

3 units

2 hours lecture, 4 hours lab

Prerequisite: ART 141 with a minimum grade of C

Recommended Preparation: ART 131 or ART 142

Credit, degree applicable

Transfer CSU

In this course, students design and create websites through hands-on experience with graphics software. Topics covered include the effective use of typography, images, and layout, organizing content, and designing an effective interface. Technical issues such as file formats, compression, testing, and debugging will also be covered.

(formerly Art 146abcd)

ART 147 - Motion Graphics

3 units

2 hours lecture, 4 hours lab

Prerequisite: ART 141 or ART 142 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course covers techniques for creating digital movies and performing nonlinear editing. Topics include history and overview of analog and digital video, analyzing selected works of commercial and fine art videos, using sound effects and music, effective use of transitions, and incorporating still images and text. Also included are file formats, compression options, and hardware required for output to multimedia sources and the World Wide Web. An original digital video project will be created by each student.

(formerly Art 147abcd)

ART 150 - The Art of Photography

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course is a survey of photography as an art form which includes the evolution of photography as art. The course will also cover the aesthetic and cultural impact of photography as art. Also included is an examination of the techniques and methods of traditional and digital photography. Students will learn camera functions and develop their ability to analyze, evaluate, and compose photographs.

Note: Art 150 is the same course as PHOT 150. Course credit is limited to Art 150 or PHOT 150.

ART 152 - Rendering

3 units

2 hours lecture, 4 hours lab

Prerequisite: ART 110 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course covers the basic methods and techniques of rendering. Emphasis is placed on the graphic representation of three-dimensional form, space, and volume within an illusory and sharp-focused context. Topics include form analysis and the application of media such as markers, water-based paint, ink, graphite, pastel and colored pencil. Preparation of art work for portfolio presentation will also be covered.

(formerly Art 52abcd)

ART 153 - Illustration I

3 units

2 hours lecture, 4 hours lab

Prerequisite: ART 110 with a minimum grade of C

Recommended Preparation: ART 152

Credit, degree applicable

Transfer CSU

This course is an introduction to illustration and stresses the creative interpretation of various subjects, situations and themes within the context of commercial art applications such as advertising, editorial and institutional. Special emphasis is placed on the creation of illustrations from rough concept sketches through finished art work. Production and media processes, color analysis and application, and portfolio development and presentation will be presented.

(formerly Art 53ab)

ART 160 - Three-Dimensional Design

3 units

2 hours lecture, 4 hours lab

Credit, degree applicable

Transfer CSU, UC

This course is an introduction to the concepts and processes of three-dimensional design. Students design and construct projects involving linear and architectural models as well as relief and solid forms. Emphasis is placed on creative solutions to design problems using various construction techniques and materials.

(formerly Art 31abcd)

ART 161 - Beginning Ceramics

3 units
2 hours lecture, 4 hours lab
Credit, degree applicable
Transfer CSU, UC

This course covers the basic methods of hand-building with clay including forming, glazing, and decorating techniques, and offers an introduction to wheel-throwing. Also covered is a brief historical and cultural survey of ceramics.

(formerly Art 61ab)

ART 173 - Introduction to Jewelry and Metalsmithing

3 units
2 hours lecture, 4 hours lab
Credit, degree applicable
Transfer CSU

This course is an introduction to the design and technical processes of jewelry and metalsmithing. Construction techniques such as sawing, soldering, forming, and surface embellishment are employed in combination with various metals and stones. Also covered are issues of contemporary aesthetics and their influence on jewelry design and construction.

(formerly Art 73ab)

ART 181 - Beginning Sculpture

3 units
2 hours lecture, 4 hours lab
Credit, degree applicable
Transfer CSU, UC

This course is an introduction to the techniques, materials, and concepts of sculpture. Instruction is designed to foster observation, composition, interpretation, and expression. Representative topics include clay modeling, casting, and bas relief. Emphasis is placed on design, form, materials, and process.

(formerly Art 81ab)

ART 187 - Printmaking I - Etching and Relief

3 units
2 hours lecture, 4 hours lab
Credit, degree applicable
Transfer CSU, UC

This course is an introduction to non-toxic methods, materials, and processes of printmaking. Topics include relief (woodcut and linoleum) and intaglio (drypoint and etching). Color and black and white printing are included, as well as four color (CMYK) techniques.

(formerly Art 87ab)

ART 194 - Gallery Management and Artist Career Issues

4 units
3 hours lecture, 4 hours lab per week to be arranged
Recommended Preparation: eligibility for ENGL 84
Credit, degree applicable
Transfer CSU

This course is a study of the theory, techniques, evaluation and analysis of gallery operations, the production of art exhibits and the discussion of issues related to the development of artists' careers.

(formerly Art 34ab)

ART 195 - Portfolio and Career Planning for Artists and Designers

3 units

3 hours lecture

Recommended Preparation: ENGL 84

Credit, degree applicable

Transfer CSU

This course provides a survey of career and educational pathways in design and the visual arts. Instruction includes the professional protocols necessary to prepare and correctly submit a portfolio, application, resume, cover letter, and artist statement for transfer to four-year art programs, job applications, grants, and exhibitions. Interview strategies, freelance management skills, e-commerce, job search techniques, and effective self-promotion strategies will also be covered.

ART 205A - History of Asian Art - India and Southeast Asia

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course surveys the arts of India and Southeast Asia from their earliest beginnings in Indus Valley cultures through the 18th century with an emphasis on Buddhist and Hindu art forms. Key artworks are studied in relation to historical, cultural, and religious contexts.

(formerly Art 5A)

ART 205B - History of Asian Art - China, Korea, and Japan

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course surveys the arts of China, Japan, and Korea from the Neolithic period through the 21st century in relation to cultural, political, religious, and philosophical contexts. It traces the transmission of cultural ideas and art forms from one civilization to another and considers the effect of Western art's historical methodologies on the study and appreciation of Asian art and culture.

(formerly Art 5B)

ART 207 - Art History of Mexico and Central and South America

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course surveys the art of Mexico, Central America, and South America, from Pre-Colombian civilizations through contemporary times. Key artworks are studied in relation to historical and cultural contexts that consider the effects of shifting social, political, philosophical, and spiritual paradigms on the production of art.

(formerly Art 7)

ART 208 - History of American Art

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course is an introductory survey of American Art from its pre-colonial past to the contemporary era with a focus on the social, political, economic, and philosophical conditions that have resulted in a culturally diverse artistic tradition. The contributions and influences of immigrants, Native Americans, African Americans, Asian Americans, Chicano Americans, Latino Americans, and European Americans will be studied in relation to historical contexts.

(formerly Art 108)

ART 208H - Honors History of American Art

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course, designed for students in the Honors Transfer Program, is an introductory survey of American Art from its pre-colonial past to the contemporary era with a focus on the social, political, economic, and philosophical conditions that have resulted in a culturally diverse artistic tradition. The contributions and influences of immigrants, Native Americans, African Americans, Asian Americans, Chicano/Latino Americans, and European Americans will be studied in relation to historical contexts. This course is enriched through more extensive reading, writing, and research assignments using primary and scholarly secondary sources.

Note: Students may take either ART 208 or Art 208H. Duplicate credit will not be awarded for ART 208 and Art 208H.

ART 209 - History of African Art

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course is an introductory survey of African art in relation to its historical and cultural contexts. It focuses on specific groups and regions with an emphasis on sub-Saharan West and Central Africa, stressing the different roles of the visual arts within each culture.

(formerly Art 9)

ART 210 - Drawing Fundamentals II

3 units

2 hours lecture, 4 hours lab

Prerequisite: ART 110 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course provides intermediate instruction in drawing with emphasis on media development, pictorial space, composition, interpretation, and improvisation.

(formerly Art 11abcd)

ART 217 - Life Drawing I

3 units

2 hours lecture, 4 hours lab

Prerequisite: ART 110 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course covers the art and technique of drawing from live models with an emphasis on anatomical structure, representation of gestures, foreshortening and proportion.

(formerly Art 17ab)

ART 218 - Life Drawing II

3 units

2 hours lecture, 4 hours lab

Prerequisite: ART 217 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course is a continuation of ART 217. Advanced problems in representing the human form are covered, with an increased emphasis on research and innovation.

(formerly Art 18abcd)

ART 218B - Life Drawing III

3 units

2 hours lecture, 4 hours lab

Prerequisite: ART 218 with a minimum grade of C

Credit, degree applicable

Transfer CSU

This advanced Life Drawing course encourages students to develop a cohesive body of artworks that explore individual drawing approaches through directed research. Emphasis is on developing increasingly more complex concepts, themes, and subject matter.

ART 219 - Watercolor Painting I

3 units

2 hours lecture, 4 hours lab

Prerequisite: ART 110 with minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course introduces the student to the concepts and techniques of watercolor painting with emphasis placed on basic washes, media manipulation, color theory, composition and interpretation.

(formerly Art 19ab)

ART 220 - Watercolor Painting II

3 units

2 hours lecture, 4 hours lab

Prerequisite: ART 219 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course is a continuation of the concepts and techniques of watercolor painting. Progressively more challenging problems of technique, color, composition, expression and improvisation will be presented.

(formerly Art 20abcd)

ART 222 - Fundamentals of Painting I

3 units

2 hours lecture, 4 hours lab

Prerequisite: ART 110 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course introduces instruction in the materials, methods, and techniques of painting. Emphasis is placed on paint manipulation, color mixing, compositional structure, and form translation.

(formerly Art 22ab)

ART 223A - Fundamentals of Painting II

3 units

2 hours lecture, 4 hours lab

Prerequisite: ART 222 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course provides intermediate instruction in the materials, methods and techniques of painting with an emphasis on developing proficiency in the use of pictorial space, color, composition and interpretation.

(formerly Art 223)

ART 223B - Fundamentals of Painting III

3 units

2 hours lecture, 4 hours lab

Prerequisite: ART 223A with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course provides directed research and critical analysis of painting while emphasizing increasingly more complex concepts, themes, and subject matter. Students are encouraged to pursue individual approaches through a combination of historical and contemporary styles. Also covered are techniques and processes necessary to complete a cohesive body of artwork that integrates research, methodology, and invention, and reflects a unified, self-directed visual theme.

ART 224 - Life Painting I

3 units

2 hours lecture, 4 hours lab

Prerequisite: ART 217 and ART 222 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

The techniques and concepts of life painting are introduced in this course. Translation and adaptation of live-model poses are explored in the context of the painting process. The functions and application of anatomy, volume, chiaroscuro, color, space, and composition are also covered.

(formerly Art 24ab)

ART 225A - Life Painting II

3 units

2 hours lecture, 4 hours lab

Prerequisite: ART 224 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course is a continuation of the techniques and aesthetic issues introduced in Life Painting I. Emphasis is placed on the interpretation of live-model poses, media manipulation, color, space, composition, and expression.

(formerly Art 225)

ART 225B - Life Painting III

3 units

2 hours lecture, 4 hours lab

Prerequisite: ART 225A with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course continues painting the figure from live models, applying the knowledge and techniques developed in ART 225A. Emphasis is on developing a student's individual vision and expression through composition, concept, coordination of media, process, and directed research of historical and contemporary styles.

ART 230 - Two-Dimensional Design II

3 units

2 hours lecture, 4 hours lab

Prerequisite: ART 130 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course is an expanded study of the elements and principles of two-dimensional design. Special emphasis is placed on pictorial interpretation, conceptual synthesis and graphic purpose. Experimental design strategies will be introduced including variation studies, research and production methods and electronic media applications.

(formerly Art 38abcd)

ART 231 - Lettering and Typography II

3 units

2 hours lecture, 4 hours lab

Prerequisite: ART 131 with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course continues the study of typographic and lettering fundamentals including the Roman alphabet and its various categories, families and related fonts. Emphasis is placed on creative problem solving including self-generated project themes and solutions, inventive production strategies, and experimentally-derived aesthetic content. The creation and presentation of a portfolio of art work is also included.

(formerly Art 42abcd)

ART 232 - Advertising Design II

3 units

2 hours lecture, 4 hours lab

Prerequisite: ART 132 with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course is a continuation of Advertising Design I. Emphasis is placed on the development of a strong foundation for visualizing design problems and formulating their solutions as well as the correlation of form with content, function and context. Materials will be prepared for portfolio presentation.

(formerly Art 40abcd)

ART 233 - Graphic Design II

3 units

2 hours lecture, 4 hours lab

Prerequisite: ART 133 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course continues the study of the concepts and processes of graphic design. Problem-solving skills and the creative design process are emphasized through digital imaging, typography, identity design and page layout. Students will explore various problem-solving strategies using raster, vector graphics, and page layout software, as well as with traditional art and design media.

ART 247A - Intermediate Motion Graphics

3 units

2 hours lecture, 4 hours lab

Prerequisite: ART 147 with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course continues studies at the intermediate level in the materials, methods, and techniques of Motion Graphics with an emphasis on increasing proficiency in the creation of digital movies, visual effects, and animation. Emphasis is placed on refining concepts and design skills to produce more advanced portfolio projects for a student reel.

ART 253 - Illustration II

3 units

2 hours lecture, 4 hours lab

Prerequisite: ART 153 with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course is a continuation of the concepts and techniques presented in Illustration I. Increasingly more advanced illustration projects, techniques, concepts and methods will be presented. Emphasis is placed on the development of original concepts, the refinements of techniques and production methods, and the development and presentation of portfolio-quality art work.

(formerly Art 54abcd)

ART 262 - Intermediate Ceramics

3 units

2 hours lecture, 4 hours lab

Prerequisite: ART 161 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

In this course, students will explore basic functional forms, surface decoration, glazing techniques, clays and clay bodies with an emphasis on the use of the potter's wheel. The history of Early American, Far East and Western European ceramics is also covered.

(formerly Art 62abcd)

ART 263 - Advanced Ceramics

3 units

2 hours lecture, 4 hours lab

Prerequisite: ART 262 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

In this course, students will continue to explore functional forms and surface enrichment and experiment with glazing techniques. Highfire clays and glazes, kiln loading and the theory of firing will be introduced. A brief history of ceramics will be included.

(formerly Art 63abcd)

ART 274 - Jewelry Fabrication

3 units

2 hours lecture, 4 hours lab

Prerequisite: ART 173 with a minimum grade of C

Credit, degree applicable

Transfer CSU

In this intermediate course, students will develop design skills and concepts through individual projects in jewelry fabrication, surface embellishment, forming, stone setting, and tool making.

(formerly Art 74abcd)

ART 275 - Jewelry Casting

3 units

2 hours lecture, 4 hours lab

Prerequisite: ART 173 with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course covers the casting process as it relates to the field of jewelry. Model making, lost wax casting, and mold making will be introduced. Design skills and concepts will be developed through individual projects.

(formerly Art 75abcd)

ART 282 - Life Sculpture

3 units

2 hours lecture, 4 hours lab

Prerequisite: ART 217 or ART 160 or ART 161 or ART 181 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course explores the anatomical structure of the human figure through sculptural studies. Students will develop technical and creative skills including observation, drawing and modeling. Students will work from live models.

(formerly Art 82abcd)

ART 283 - Bronze Casting

3 units

2 hours lecture, 4 hours lab

Prerequisite: ART 160 or ART 161 or ART 173 or ART 181 with a minimum grade of C in prerequisite

Credit, degree applicable

Transfer CSU

This course is an introduction to the aesthetics and processes used in the making of bronze sculpture. Topics include the elements of sculptural design, wax formulation and fabrication, the spruing process, the investing of wax patterns, mold making, finishing techniques, and bronze foundry procedures.

(formerly Art 83abcd)

ART 288 - Printmaking II - Etching and Relief

3 units

2 hours lecture, 4 hours lab

Prerequisite: ART 187 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course continues the study of intaglio and relief printing at an intermediate level. Students will explore non-toxic methods for plate development and multicolor printing using digital and non-digital techniques.

(formerly Art 88abcd)

ART 289 - Lithography

3 units

2 hours lecture, 4 hours lab

Prerequisite: ART 187 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course covers the fundamental theories and practices involved in the development of graphic images based on lithographic techniques and processes with an emphasis on the unique qualities of the lithographic print, including color. Additional emphasis is placed on materials, techniques, tools, and craftsmanship relevant to fine art lithographic printmaking.

(formerly Art 89abcd)

ART 290 - Screen Printing

3 units

2 hours lecture, 4 hours lab

Credit, degree applicable

Transfer CSU, UC

This course is an introduction to non-toxic methods, materials, and techniques of screen printing. Emphasis is placed on single and multiple layer printing, digital and non-digital applications as well as single and multicolor printing (CMYK) techniques. Use of various substrates such as paper, vinyl, and fabric will also be covered.

ASTR 12 - Astronomy Laboratory

1 unit

3 hours lab

Prerequisite: ASTR 20 or ASTR 20H or ASTR 25 or ASTR 25H with a minimum grade of C in prerequisite or concurrent enrollment

Credit, degree applicable

Transfer CSU, UC*

The astronomy laboratory provides students with an introduction to the observation of the sky with telescopes, binoculars, and the unaided eye. The student will become familiar with the principles of set up and operation of telescopes and use them to view the moon, the sun, planets, stars, star clusters, and nebulae. The student will use the principles of astronomy to interpret their observations. Students will also learn to identify the bright stars and major constellations visible in California.

Note: Students will receive UC credit if Astronomy 12 is taken concurrently with or after ASTR 20 or ASTR 25.

ASTR 13 - Astronomical Optics

1 unit

3 hours lab

Recommended Preparation: ASTR 20 or ASTR 20H or ASTR 25 or ASTR 25H with a minimum grade of C or equivalent MATH 73 or MATH 80

Credit, degree applicable

Transfer CSU

In this course, the student will be introduced to principles of astronomical optics. The student will apply those principles to the design, fabrication, and use of a telescope, which will be tested under the night sky. Primary mirrors will be ground, smoothed, polished, and figured by hand. Extensive testing will be done in the optical shop. Optics and optical testing theories will be presented. Students will design and build a custom optical tube assembly and telescope mount.

Note: For this course, students will pay a minimum cost of \$375 for a completed telescope.
(formerly Astronomy 13abc)

ASTR 20 - The Solar System

3 units

3 hours lecture

Recommended Preparation: ENGL 84

Credit, degree applicable

Transfer CSU, UC

This course is an introduction to the major planets and the smaller members of the solar system such as moons, asteroids, Kuiper Belt Objects, and comets. Theories of the origin and histories of the planets are presented. The early history of astronomy and the Copernican Revolution are discussed. Sky phenomena such as the constellations, the seasons, eclipses, and planetary motions are demonstrated in the planetarium. The possibility of life elsewhere in the solar system is examined.

ASTR 20H - Honors The Solar System

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This honors course, intended for students in the Honors Transfer Program, is an introduction to the major planets and the smaller members of the solar system such as moons, asteroids, Kuiper Belt Objects, and comets. Theories of the origin and histories of the planets are presented. The early history of astronomy and the Copernican Revolution are discussed. Sky phenomena such as constellations, the seasons, eclipses, and planetary motions are demonstrated in the planetarium. The possibility of life elsewhere in the solar system is examined. Students in the honors sections are required to research and write comprehensively about the origin of the solar system.

Note: Students may take either ASTR 20 or Astronomy 20H. Duplicate credit will not be awarded for ASTR 20 and Astronomy 20H.

ASTR 25 - Stars and Galaxies

3 units

3 hours lecture

Recommended Preparation: ENGL 84

Credit, degree applicable

Transfer CSU, UC

This course is an introduction to the universe and its history. The main focus is on our view of the heavens and how astronomers learn about stars and galaxies. The formation, life histories, and fates of different kinds of stars, including the sun, are examined. Exotic stars as well as black holes are explored. The structure and distribution of galaxies are discussed, with a focus on our own Milky Way Galaxy. The possibility of simple and intelligent life in the Milky Way Galaxy will be examined. The history of the universe, starting with the Big Bang is also investigated.

ASTR 25H - Honors Stars and Galaxies

3 units

3 hours lecture

Recommended Preparation: ENGL 1A or ENGL 1AH

Credit, degree applicable

Transfer CSU

This honors course, intended for students in the Honors Transfer Program, is an introduction to the universe and its history. The main focus is on our view of the heavens and how astronomers learn about stars and galaxies. The formation, life histories, and fates of different kinds of stars, including the sun, are examined. Exotic stars as well as black holes are explored. The structure and distribution of galaxies are discussed, with a focus on our own Milky Way Galaxy. The possibility of simple and intelligent life in the Milky Way Galaxy will be examined. The history of the universe, starting with the Big Bang is also investigated. This course is enriched through extensive rigorous reading, writing, and research assignments.

Note: Students may take either ASTR 25 or Astronomy 25H. Duplicate credit will not be awarded for ASTR 25 and Astronomy 25H.

ASTR 99 - Independent Study

1-3 units

hours to be arranged

Enrollment Limitation: two courses in Astronomy with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work

Credit, degree applicable

Transfer CSU*

This course provides the student an opportunity to explore research problems in Astronomy not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned laboratory work and/or research projects (54 hours per unit).

Note: *Transfer limitations apply. For eligibility requirements, go to www.elcamino.edu/admissions/credit.asp. *Note: Transfer limitations apply.

(formerly Astronomy 99abc)

ACRP 1A - Introduction to Automotive Collision Repair

8 units

3 hours lecture, 15 hours lab

Credit, degree applicable

Transfer CSU

This course is designed to introduce students to automotive collision repair and provide an overview of the skills needed for employment in industry. Topics covered include safety practices, industry repair standards, repair theory, tool identification and use, vehicle construction, gas and electric welding, metal finishing, grinding, applying and shaping plastic filler and spraying primer. This course contains Inter-Industry Conference on Auto Collision Repair (I-CAR) Professional Development Program curriculum.

Note: Automotive Collision Repair/Painting 1A is equivalent to ACRP 4A and ACRP 5A.

ACRP 1B - Collision Repair Equipment and Welding Techniques

8 units

3 hours lecture, 15 hours lab

Prerequisite: ACRP 1A or ACRP 4A with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

This course provides instruction on collision repair equipment and welding techniques involving safety practices, vehicle collision analysis and theory, vehicle disassembly procedures and body component fit-up and alignment principles. The topics of replacing door skins, panel bonding, steel patch panel fabrication, weld-in panel replacement and aluminum panel repair are also covered. Equipment used includes Metal Inert Gas (MIG) and Squeeze-Type Resistance Spot Welders (STRSW), hydraulic jacks, pneumatic and other specialty tools. This course contains Inter-Industry Conference on Auto Collision Repair (I-CAR) Professional Development Program curriculum.

ACRP 1C - Major Collision Analysis and Repair

8 units

3 hours lecture, 15 hours lab

Prerequisite: ACRP 1A or ACRP 4A with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

This course provides instruction in full frame and unibody vehicle construction and damage types, locating and analyzing direct and indirect damage, planning a pull, setting up and using a frame rack with and without computerized measuring systems, and replacing structural parts and panels with Metal Inert Gas (MIG) and Squeeze-Type Resistance Spot Welders (STRSW). The topics of vehicle sectioning, structural glass, suspension components, front-end alignment, and damage estimating are also covered. This course contains Inter-Industry Conference on Auto Collision Repair (I-CAR) Professional Development Program curriculum.

ACRP 1D - Automotive Component Systems Analysis and Repair

8 units

3 hours lecture, 15 hours lab

Prerequisite: ACRP 1A or ACRP 4A with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

This course includes instruction in steering and suspension system parts and damage identification, wheel alignment, airbag deactivation and reactivation, hybrid/electric vehicle safety and interior upholstery and reconditioning. This course also provides instruction in correcting structural damage and replacing structural parts such as core supports, center pillars, front side members, structural glass, aluminum and composite structural components and restoring corrosion protection. This course contains Inter-Industry Conference on Auto Collision Repair (I-CAR) Professional Development Program curriculum.

ACRP 2A - Basic Automotive Painting - Refinishing

8 units

3 hours lecture, 15 hours lab

Prerequisite: ACRP 1A or ACRP 5A with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

In this course, students are introduced to automotive painting and refinishing and the skills needed for employment in industry. Topics covered include safety practices, industry repair standards, Volatile Organic Compound (VOC) recording, surface identification, surface preparation, abrasives, metal conditioning, vehicle masking, primers, and spray equipment. This course contains Inter-Industry Conference on Auto Collision Repair (I-CAR) Professional Development Program curriculum.

ACRP 2B - Automotive Refinishing Materials and Equipment

8 units

3 hours lecture, 15 hours lab

Prerequisite: ACRP 1A or ACRP 5A with a minimum grade of C in prerequisite or equivalent

Credit, degree applicable

Transfer CSU

This course provides instruction on the principles of automotive refinishing involving safety practices and equipment, air supply equipment, refinishing spray booth, spray equipment, undercoat materials, solvents, topcoat color systems, and paint application procedures. This course contains Inter-Industry Conference on Auto Collision Repair (I-CAR) Professional Development Program curriculum.

ACRP 2C - Automotive Refinishing Applications

8 units

3 hours lecture, 15 hours lab

Prerequisite: ACRP 1A or ACRP 5A and with a minimum grade of C in prerequisite or equivalent

Credit, degree applicable

Transfer CSU

This course provides instruction on the principles of automotive refinishing involving safety practices, estimating, paint additives, paint removal, plastic component refinishing, spot repair, color sanding and buffing, multi-stage finishes and paint accessories. This course includes Inter-Industry Conference on Auto Collision Repair (I-CAR) Professional Development Program curriculum.

ACRP 3A - Introduction to Automotive Collision Estimating

3 units
3 hours lecture
Credit, degree applicable
Transfer CSU

This course provides instruction on the theory and application of developing a written damage estimate using forms, books, guides and charts. Students will learn vehicle construction types and parts nomenclature, industry standard repair and replacement procedures, state and federal laws regarding collision repair, and how estimating fits into both the technical and business sides of operating a successful collision repair shop.

ACRP 3B - Computerized Collision Damage Estimating

3 units
3 hours lecture
Prerequisite: ACRP 3A with a minimum grade of C or equivalent
Credit, degree applicable
Transfer CSU

This course provides instruction on the development of computer-generated damage estimate using both Certified Collateral Corporation's One software (CCC One) and Mitchell estimating software. Students expand their knowledge of non-structural, manual estimate writing by: examining and estimating structurally damaged vehicles that require frame straightening, structural panel replacement, vehicle sectioning, electrical and mechanical repairs, suspension alignment and wheel alignment. Students also learn how to make use of the digital documentation, work flow and business management features of the software to run an efficient and profitable repair shop.

ACRP 4A - Beginning Automotive Collision Repair I

4 units
2 hours lecture, 7 hours lab
Credit, degree applicable
Transfer CSU

This course provides instruction in basic safety, tool identification and use, vehicle construction and parts nomenclature, basic estimating, small dent repair, plastics scratch and dent repair and the mixing and application of primer. This course contains Inter-Industry Conference on Auto Collision Repair (I-CAR) Professional Development Program curriculum.

ACRP 4B - Beginning Automotive Collision Repair II

4 units
2 hours lecture, 7 hours lab
Credit, degree applicable
Transfer CSU

This course provides instruction in automotive Metal Inert Gas (MIG) and Squeeze-Type Resistance Spot Welding (STRSW) and safety, automotive metals, metal finishing, large dent repair, corrosion protection, and vehicle disassembly and reassembly. This course contains Inter-Industry Conference on Auto Collision Repair (I-CAR) Professional Development Program curriculum.

ACRP 4C - Intermediate Automotive Collision Repair I

4 units
2 hours lecture, 7 hours lab
Credit, degree applicable
Transfer CSU

This course provides instruction in structural plastic repair, surface and structural repair of fiberglass and composites, aluminum repair and surface treatment for refinishing, vehicle frame and structural parts nomenclature, frame and unibody damage identification and measurement, structural damage estimating, and replacement panel fitment and alignment. This course contains Inter-Industry Conference on Auto Collision Repair (I-CAR) Professional Development Program curriculum.

ACRP 4D - Intermediate Automotive Collision Repair II

4 units
2 hours lecture, 7 hours lab
Credit, degree applicable
Transfer CSU

This course introduces students to frame straightening and severe collision damage using the frame rack, power post, damage dozer, hydraulic jacks and Porto-Power. hydraulic ram. Topics covered include how to section a vehicle, replace damaged unibody structural panels and prepare replaced panels for rustproofing/refinishing. This course contains Inter-Industry Conference on Auto Collision Repair (I-CAR) Professional Development Program curriculum.

ACRP 5A - Beginning Automotive Painting I

4 units
2 hours lecture, 7 hours lab
Credit, degree applicable
Transfer CSU

This course provides instruction in personal safety, environmental laws, introduction to surface preparation, mixing ratios, spray booth use, spray gun adjustment, use and cleaning, priming and painting vehicle parts and panels, and color sanding and buffing. This course contains Inter-Industry Conference on Auto Collision Repair (I-CAR) Professional Development Program curriculum.

ACRP 5B - Beginning Automotive Painting II

4 units
2 hours lecture, 7 hours lab
Credit, degree applicable
Transfer CSU

This course provides instruction in vehicle disassembly for refinishing, surface preparation of unpainted surfaces, specialty undercoats and corrosion protection, plastics refinishing, and painting parts and complete cars. This course contains Inter-Industry Conference on Auto Collision Repair (I-CAR) Professional Development Program curriculum.

ACRP 5C - Intermediate Automotive Refinishing I

4 units
2 hours lecture, 7 hours lab
Credit, degree applicable
Transfer CSU

In this course, students will learn refinishing repair standards and how to write an estimate for refinishing. Students will learn how to identify and correct paint flaws, choose color variants, retrieve and mix paint formulas, adjust paint for color match, and perform panel blends and spot repairs. Students will also learn how to mask panels for blending and how to refinish composite materials such as fiberglass and carbon fiber. This course contains Inter-Industry Conference on Auto Collision Repair (I-CAR) Professional Development Program curriculum.

ACRP 5D - Intermediate Automotive Refinishing II

4 units
2 hours lecture, 7 hours lab
Credit, degree applicable
Transfer CSU

This course provides instruction on production painting skills and maximizing shop throughput by controlling the painting environment through spray booth controls, temperature and humidity control, paint additives and gun adjustment. Additional topics covered include spot blending and applying tri-coat paints, flat paints, truck bedliner, single stage paints and interior paints. This course contains Inter-Industry Conference on Auto Collision Repair (I-CAR) Professional Development Program curriculum.

ACRP 6 - Automotive Collision Repair for Non-Majors

2 units
1 hour lecture, 3 hours lab
Credit, degree applicable
Transfer CSU

This course is designed to provide students with a brief, hands-on introduction to all facets of automotive collision repair. Topics include safety practices, customer rights and the collision repair process, auto parts nomenclature, dent removal, plastic repair, filler application and shaping, priming, painting and detailing.

(formerly Automotive Collision Repair/Painting 6abcd)

ACRP 20 - Automotive Collision Investigation

3 units
3 hours lecture
Credit, degree applicable
Transfer CSU

This is an introductory course in automotive collision investigation designed for students preparing for employment in the fields of automotive collision repair, automotive insurance investigation, and accident reconstruction. Emphasis is placed upon vehicle identification, vehicle design and construction, occupant restraint systems, tire identification and construction, identification of tire marks, the coefficient of friction, and speed from skid formulas.

ACRP 22 - Automotive Repair Fraud

3 units

3 hours lecture

Recommended Preparation: ACRP 20

Credit, degree applicable

Transfer CSU

This course covers the elements of fraud encountered in the automotive repair industry and is designed to prepare students for employment in the fields of automotive collision repair, automotive insurance investigation, and accident reconstruction. Topics include fraud detection, investigation procedures and collection of evidence related to staged traffic accidents, Vehicle Identification Number (VIN) fraud, and auto insurance fraud.

ACRP 24 - Automotive Collision Analysis

3 units

3 hours lecture

Credit, degree applicable

Transfer CSU

This course covers the elements of automotive collision analysis and is designed to prepare students for employment in the fields of automotive collision repair, automotive insurance investigation, and accident reconstruction. Emphasis is placed on accident causation factors, collision deformation, low speed impacts, calculation of drag factors, speed determination from crush analysis, Event Data Recorder (EDR), fault analysis, roadway debris, and human factors.

ACRP 26 - Automotive Accident Reconstruction

3 units

3 hours lecture

Recommended Preparation: ACRP 24

Credit, degree applicable

Transfer CSU

This course covers the elements of automotive collision reconstruction and is designed to prepare students for employment in the fields of automotive collision repair, automotive insurance investigation, and accident reconstruction. Emphasis is placed on photography of vehicle damage and computer modeling, measuring and documenting skid marks, calculation of drag factors, speed from skid marks considering radius and critical speed scuff, determination of combined velocities, occupant dynamics, time and position analysis, force line determination and Principle Direction of Force (PDOF), conservation of momentum analysis, and Delta-V determination.

ACRP 95 - Cooperative Work Experience Education

2-4 units

hours to be arranged

Enrollment Limitation: Employment or volunteer work in a position related to the student's major or career goal by the second week of the semester. Completion of or current enrollment in one course from the major.

Credit, degree applicable

Transfer CSU*

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Automotive Collision Repair/Painting field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

Note: *Transfer limitations apply. The total units earned for Cooperative Work Experience Education may not exceed 16 units. (formerly Automotive Collision Repair/Painting 95abcd)

ACRP 99 - Independent Study

1-3 units

hours to be arranged

Enrollment Limitation: two courses in Automotive Collision Repair/Painting with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work

Credit, degree applicable

Transfer CSU*

This course provides special advanced studies in a subject field of Automotive Collision Repair/Painting not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Automotive Collision Repair/Painting projects (54 hours per unit).

Note: *Transfer limitations apply. For eligibility requirements, go to www.elcamino.edu/admissions/credit.asp (formerly Automotive Collision Repair/Painting 99abc)

ATEC 1 - Introduction to Automotive Service

2 units
2 hours lecture, 2 hours lab
Credit, degree applicable
Transfer CSU

This is an introduction to the study of automotive servicing including engine, ignition, fuel, cooling, charging, cranking, drive line, brakes and suspension systems construction and operational theories. Laboratory activities include maintenance procedures and proper use of tools utilized in the field.

ATEC 11 - Brakes, Suspension and Four Wheel Alignment

8 units
5 hours lecture, 10 hours lab
Recommended Preparation: ATEC 1 ATEC 22B or ATEC 25 ATEC 26 ENGL A
Credit, degree applicable
Transfer CSU

This course covers the theory and operation, diagnosis, service, and repair of automotive braking, suspension, and steering systems.

Note: This course is the same as the two-course sequence ATEC 14 and ATEC 16. Students who have completed ATEC 14 and ATEC 16 will not receive credit for Automotive Technology 11.

ATEC 14 - Brakes

4 units
3 hours lecture, 3 hours lab
Recommended Preparation: ATEC 1; ATEC 22B or ATEC 25; ATEC 26; ENGL A
Credit, degree applicable
Transfer CSU

This course covers the theory and operation, diagnosis, service, and repair of automotive braking systems.

Note: The two-course sequence Automotive Technology 14 and ATEC 16 is the same as ATEC 11.

ATEC 16 - Suspension and Four Wheel Alignment

4 units
3 hours lecture, 3 hours lab
Recommended Preparation: ATEC 1 ATEC 22B or ATEC 25 ATEC 26 ENGL A
Credit, degree applicable
Transfer CSU

This course covers the theory and operation, diagnosis, service, and repair of automotive suspension and steering systems.

ATEC 21 - Introduction to Engine Performance

2 units
2 hours lecture, 2 hours lab
Recommended Preparation: ATEC 1 or equivalent
Credit, degree applicable
Transfer CSU

This course covers the study, theory and application of computer controlled engine management systems, minor engine performance, electrical and fuel systems. Laboratory activities stress the proper use of test equipment utilized in the automotive field.

ATEC 22A - Introduction to Engine Performance, Electrical and Fuel Systems

8 units
5 hours lecture, 10 hours lab
Recommended Preparation: ATEC 1 or equivalent
Credit, degree applicable
Transfer CSU

This is an introductory engine performance course, which covers construction and operation of the following systems: computer controlled engine management, electrical charging, cooling, emission controls, fuel, and ignition. Laboratory activities stress the proper use of modern test equipment and repair procedures used in the automotive field.

Note: This course is equivalent to the two-course sequence ATEC 23 and ATEC 24. Students who have completed ATEC 23 and ATEC 24 will not receive credit for Automotive Technology 22A.

ATEC 22B - Electrical, Electronics and Computer Controlled Systems

8 units

5 hours lecture, 10 hours lab

Prerequisite: ATEC 22A with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

This course covers the study of Automotive On-Board Diagnostics II computer controlled engine management systems, body electrical and electronic systems, onboard computer networking and computer controlled ignition testing, including diagnosis and repair procedures. Laboratory activities stress the proper use of test equipment utilized in industry.

Note: Automotive Technology 22B is the same as two-course sequence ATEC 25 and ATEC 26. Students who have completed ATEC 25 and ATEC 26 will not receive credit for Automotive Technology 22B.

ATEC 23 - Engine Performance, Electrical and Fuel Systems

4 units

3 hours lecture, 3 hours lab

Recommended Preparation: ATEC 1 or equivalent

Credit, degree applicable

Transfer CSU

This course covers the study of major engine tune-up service and testing of emission control systems. Laboratory activities stress the proper use of test equipment utilized in the automotive field.

Note: The two-course sequence Automotive Technology 23 and ATEC 24 is equivalent to ATEC 22A.

ATEC 24 - Computer Controlled Engine Management, Fuel Systems and Emissions

4 units

3 hours lecture, 3 hours lab

Recommended Preparation: ATEC 21 or ATEC 23 or equivalent

Credit, degree applicable

Transfer CSU

This course covers the study of computer controlled engine management systems with an emphasis on onboard diagnosis second generation (OBD II) protocols, fuel system and fuel injection system testing, diagnosis and service and vehicle emissions. Laboratory activities stress the proper use of modern test equipment utilized in the automotive field.

Note: The two-course sequence ATEC 23 and 24 is equivalent to ATEC 22A.

ATEC 25 - Automotive Electrical Systems

4 units

3 hours lecture, 3 hours lab

Recommended Preparation: ATEC 21 or ATEC 23 or equivalent

Credit, degree applicable

Transfer CSU

This course covers the theory and operation of automotive electricity, electronic components and systems. Laboratory activities stress the proper use of test equipment utilized in the automotive field.

Note: The two-course sequence Automotive Technology 25 and ATEC 26 is the same as ATEC 22B.

ATEC 26 - Automotive Testing and Diagnosis

4 units

3 hours lecture, 3 hours lab

Prerequisite: A total of 8 units from the following courses: ATEC 22A, or ATEC 23, or ATEC 24, or ATEC 25 with a minimum grade of C in prerequisite or equivalent

Credit, degree applicable

Transfer CSU

This course covers the study of advanced automotive testing and diagnostic procedures of modern computer controlled engine management systems including: ignition, fuel trim, electrical and electronic systems, On Board Diagnostics generation 2 (OBD 2) computer control systems and related network multiplexing and communications. Electronic body control operations, networking and diagnostics are also explored. Laboratory activities stress the proper use of modern diagnostic equipment utilized in the automotive field.

Note: The two-course sequence ATEC 25 and 26 is the same as ATEC 22B.

ATEC 33 - Transmissions, Drive Train and Drive Axles

8 units

5 hours lecture, 10 hours lab

Recommended Preparation: ATEC 1 or ATEC 21 ENGL A

Credit, degree applicable

Transfer CSU

This course covers the theory and operation, diagnosis, service, and repair of automotive automatic and, manual transmissions, transaxles, and drive trains.

Note: This course is the same as two-course sequence ATEC 34 and ATEC 35. Students who have completed ATEC 34 and ATEC 35 will not receive credit for Automotive Technology 33.

ATEC 34 - Automatic Transmissions

4 units

3 hours lecture, 3 hours lab

Recommended Preparation: ATEC 1 ATEC 22A or ATEC 23 ATEC 24 ATEC 22B or ATEC 25 ATEC 26 ENGL A

Credit, degree applicable

Transfer CSU

This course covers the theory and operation, diagnosis, service, and repair of automotive automatic transmissions and transaxles.

Note: The two-course sequence Automotive Technology 34 and ATEC 35 is the same as ATEC 33. Students who have completed Automotive Technology 34 and ATEC 35 will not receive credit for ATEC 33.

ATEC 35 - Manual Transmission, Drive Train and Drive Axles

4 units

3 hours lecture, 3 hours lab

Recommended Preparation: ATEC 1 ATEC 22A or ATEC 25 ATEC 26 ENGL A

Credit, degree applicable

Transfer CSU

This course covers the theory and operation, diagnosis, service, and repair of automotive manual transmissions, drive axles, and drive trains.

Note: The two-course sequence ATEC 34 and 35 is the same as ATEC 33. Students who have completed ATEC 34 and 35 will not receive credit for ATEC 33.

ATEC 41 - Engine Rebuilding

8 units

5 hours lecture, 10 hours lab

Recommended Preparation: ATEC 1 or equivalent

Credit, degree applicable

Transfer CSU

This course covers engine construction, operation, diagnosis and proper rebuilding procedures. Laboratory activities emphasize the proper use of tools and equipment utilized in the field of engine diagnosis and rebuilding. Also covered are machining processes such as drilling and tapping, milling, surfacing, boring and honing, pin fitting, press work, resurfacing, reaming, knurling, repairing of damaged threads, measuring, grinding valves and valve seats and crack detection methods and repairing.

ATEC 42 - Engine Repair

8 units

5 hours lecture, 10 hours lab

Recommended Preparation: ATEC 1 or equivalent

Credit, degree applicable

Transfer CSU

This course covers the study of automotive engine construction and operation, diagnosis and repair procedures of the following: cylinder head removal and valve grinding, camshaft and timing gear replacement, water pump replacement, oil, coolant and manifold (intake and exhaust) leaks, engine maintenance and the installation of long or short blocks Replace pistons and/or connecting rods, piston rings, engine bearings, crankshaft seals, camshaft seals, oil pan gasket, valve/camshaft cover gaskets, flywheel, pulleys, crankshaft balancer and other engine repair items that would need to be replaced or repaired. Laboratory activities stress the proper use of equipment utilized in the field.

ATEC 43 - Introduction to Engine Repair

4 units

3 hours lecture, 3 hours lab

Recommended Preparation: ATEC 1 ENGL A

Credit, degree applicable

Transfer CSU

This course covers the study of automotive engine construction and operation. The diagnosis and repair procedures will include the following: cylinder head valve grinding, camshaft and timing gear, water pump, diagnosing fluid leaks, and manifold (intake and exhaust) leaks and engine maintenance. Laboratory activities stress the proper use of equipment utilized in the automotive field.

ATEC 45 - Automotive Machining

4 units

3 hours lecture, 3 hours lab

Recommended Preparation: ATEC 1 or equivalent

Credit, degree applicable

Transfer CSU

This course covers the study of machining processes used in the automotive engines, and diesel engines used in the automotive and light duty truck industry. Topics include drilling and tapping, milling, surfacing, boring and honing, pin fitting, press work, resurfacing, reaming, knurling, repairing of damaged threads, measuring, grinding valves and valve seats, and crack detection methods and repairing. Laboratory activities stress proper use of equipment utilized in the automotive engines and diesel engines used in the automotive and light duty truck rebuilding industry.

ATEC 51 - Introduction to Alternative Fuel Vehicles

2 units

2 lecture hours

Recommended Preparation: ENGL A

Credit, degree applicable

This course provides an overview of alternative fuels and hybrid vehicles. Topics include a brief history of alternative fuels, pros and cons of each fuel, and discussions on whether an alternative fuel vehicle is right for the consumer. The background of different fuels and an overview of current and future fuel types will be explored.

ATEC 52 - Introduction to Hybrid, Electric and Fuel-Cell Vehicle Technology

3 units

2 hours lecture, 3 hours lab

Prerequisite: ATEC 1 with a minimum grade of C or concurrent enrollment

Recommended Preparation: ENGL A and ATEC 51

Credit, degree applicable

This course explores the use of hybrid and electric battery power for vehicle transportation. Topics will include safety when using high voltage, maintenance, drivability, inverter, Direct Current to Alternating Current (DC/AC), power transfer, and battery technology. The physics of battery storage, hybrid generation systems, electric vehicle applications and their integrated systems from various manufacturers will be presented. Hybrid and high voltage service and maintenance procedures will also be discussed. Students will develop the knowledge and skills to complete the L-3 Automotive Service Excellence (ASE) exam.

ATEC 53 - Hybrid, Fuel-Cell and Electric Vehicle Diagnosis & Repair

3 units

2 hours lecture, 3 hours lab

Prerequisite: ATEC 52 and ATEC 22B or ATEC 22B with a minimum letter grade of C in prerequisite or concurrent enrollment

Credit, degree applicable

This course provides the student with the skills necessary to diagnose and repair basic to intermediate level malfunctions with hybrid, fuel-cell and electric vehicles. Students will perform regular maintenance service activities, testing with repair procedures, refueling, and Original Equipment Manufacturer (OEM) scan tool operations. This will instruct students in identifying and utilizing tools and equipment that can be sourced from manufacturers to facilitate these operations.

ATEC 81 - Automotive Air Conditioning

3 units

2 hours lecture, 4 hours lab

Recommended Preparation: ATEC 1 and ATEC 22B or ATEC 25 and ATEC 26 and ENGL A

Credit, degree applicable

Transfer CSU

This course covers the theory and operation, diagnosis, service, and repair of automotive heating, ventilation, and air conditioning systems.

ATEC 95 - Cooperative Work Experience Education

2-4 units

hours to be arranged

Enrollment Limitation: Employment or volunteer work in a position related to the student's major or career goal by the second week of the semester. Completion of or current enrollment in one course from the major.

Credit, degree applicable

Transfer CSU*

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Automotive Technology field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

Note: *Transfer limitations apply. The total units earned for Cooperative Work Experience Education may not exceed 16 units. (formerly Automotive Technology 95abcd)

ATEC 99 - Independent Study

1-3 units

hours to be arranged

Enrollment Limitation: two courses in Automotive Technology with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work

Credit, degree applicable

Transfer CSU*

This course provides special advanced studies in a subject field of Automotive Technology not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Automotive Technology projects (54 hours per unit).

Note: *Transfer limitations apply. For eligibility requirements, go to www.elcamino.edu/admissions/credit.asp (formerly Automotive Technology 99abc)

BIOL 8 - Biology of Plants

4 units

3 hours lecture, 3 hours lab

Recommended Preparation: eligibility for ENGL 1A or ENGL 1AH

Credit, degree applicable

Transfer CSU, UC

This biology course focuses on the world of plants and plant-like organisms. Students will study vascular plant anatomy, physiology, and ecology as well as explore the significance of plants to human life. The laboratory work will include a survey of algae, fungi, and all representative plant groups.

BIOL 10 - Fundamentals of Biology

4 units

3 hours lecture, 3 hours lab

Recommended Preparation: ENGL 84

Credit, degree applicable

Transfer CSU, UC*

This course is a survey of all living things: prokaryotes, protists, fungi plants, and animals. Basic principles of structure, function, and relationships of living organisms are discussed with special reference to humans.

Note: Students will not receive UC credit for Biology 10 if taken after BIOL 101.

BIOL 10H - Honors Fundamentals of Biology

4 units

3 hours lecture, 3 hours lab

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This honors course is designed for students in the Honors Transfer Program. This course is a survey of all living things: prokaryotes, protists, fungi, plants, and animals. Basic principles of structure, function, and relationships of living organisms are discussed with special reference to humans. This course is enriched through writing assignments that involve research and analysis.

Note: Students may take either BIOL 10 or Biology 10H. Duplicate credit will not be awarded for BIOL 10 and Biology 10H.

BIOL 11 - Fundamentals of Zoology

4 units

3 hours lecture, 3 hours lab

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course introduces major animal groups and the single-celled protozoans. Comparative studies of animal structure and physiology will illustrate principles of classification and evolution. Ecological topics include animal behavior, natural history, and relationships of animals to humans. Genetics and basic cell biology are also covered.

BIOL 12 - Field Zoology

4 units

2 hours lecture, 6 hours lab

Recommended Preparation: ENGL 84

Credit, degree applicable

Transfer CSU, UC

This course is a survey of invertebrate and vertebrate animals involving general principles of biology, taxonomy, physiology, and ecology with an emphasis on California. Major invertebrate phyla will be introduced in the classroom and through field trip experiences. The taxonomy, anatomy, and natural history of all major vertebrate animal classes will be explored through classroom lecture and demonstration and field assessment. Field experience will include both optional and required trips to museums, aquariums, and field locations.

BIOL 15 - Environmental Aspects of Biology

3 units

3 hours lecture

Recommended Preparation: ENGL 82

Credit, degree applicable

Transfer CSU, UC

Basic ecological and biological principles and concepts are emphasized in the study of the structure and function of ecosystems. Major ecological problems such as overpopulation, resource depletion and food production are related to endangered species and habitat degradation. Environmental pollution of air and water resources is considered in local areas as well as national and international situations. Air quality and global warming issues are considered. Students are encouraged to participate in local activities addressing environmental problems and restoring and improving local habitats.

BIOL 16 - Field Entomology

4 units

2 hours lecture, 6 hours lab

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This is a survey course in insect biology, taxonomy, physiology, and ecology, and considers the methods and economic importance of controlling insect populations. Major insect orders and families are introduced through lecture with slides and live and preserved specimens. Emphasis is placed on learning how to identify insect specimens in the laboratory and to recognize them in the field. Field trips to local sites, local desert and coastal mountain habitats will be taken to practice collection, preparation, and recognition techniques.

BIOL 17 - Marine Biology

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This is an introductory marine biology lecture course exploring biological principles of structure, function and adaptation for marine life. It includes a review of the history of marine biology and a discussion of local species of marine plants and animals and major marine communities. Human interaction and impact on the ocean is also discussed.

BIOL 18 - Marine Biology Laboratory

1 unit

3 hours lab

Prerequisite: BIOL 17 with a minimum grade of C or concurrent enrollment

Recommended Preparation: eligibility for ENGL 84

Credit, degree applicable

Transfer CSU, UC

This is an introductory marine biology laboratory course designed to complement the marine biology lecture course. The laboratory course will explore the animals and plants living in the ocean and their structure and adaptations for a marine environment. Local species will be identified and classified and local aquariums will be visited.

BIOL 99 - Independent Study in Life Science

1-3 units

hours to be arranged

Enrollment Limitation: any two Life Science courses, except Biology 10 or Biology 15, with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work

Credit, degree applicable

Transfer CSU*

This course provides special advanced studies in a subject field of Biology not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Biology projects (54 hours per unit).

Note: *Transfer limitations apply. For eligibility requirements, go to www.elcamino.edu/admissions/credit.asp (formerly Biology 99abc)

BIOL 101 - Principles of Biology I

5 units

3 hours lecture, 6 hours lab

Prerequisite: CHEM 4 or CHEM 4H with minimum grade of C or equivalent

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course is a survey of eukaryotic organisms, their evolution and ecology. The student will have a thorough exposure to plant and animal anatomy and physiology, and will utilize animal dissection in the lab. Students will be expected to complete a project that includes hypothesis, prediction, experimentation, and presentation of results. This course is one of three courses in the biology series designed for biology majors, including those students planning to pursue a career in medicine, dentistry, or other life sciences.

Note: It is recommended that CHEM 1A be taken concurrently in preparation for BIOL 102.

BIOL 101H - Honors Principles of Biology I

5 units

3 hours lecture, 6 hours lab

Prerequisite: CHEM 4 with minimum grade of C in prerequisite or equivalent

Recommended Preparation: eligibility for ENGL 1A or ENGL 1AH

Credit, degree applicable

Transfer CSU

This honors course, intended for students in the Honors Transfer Program, is a survey of eukaryotic organisms, their evolution and ecology. The student will have a thorough exposure to plant and animal anatomy and physiology, and will utilize animal dissection in the lab. Students will be expected to complete a project that includes hypothesis, prediction, experimentation, and presentation of results. This course is one of three courses in the biology series designed for biology majors, including those students planning to pursue a career in medicine, dentistry, or other life sciences. This course is enriched through extensive rigorous reading, writing, and research assignments.

Note: Students may take either BIOL 101 or Biology 101H. Duplicate credit will not be awarded for BIOL 101 and Biology 101H.

BIOL 102 - Principles of Biology II

5 units

3 hours lecture, 6 hours lab

Prerequisite: CHEM 1A with minimum grade of C or equivalent

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course offers a detailed study of eukaryotic cell anatomy, metabolism, and division, including the study of Mendelian genetics and the molecular genetics of eukaryotes. Prokaryotic cellular structure (eubacteria and archaea), microbial genetics, and viruses are also studied. The scientific method is discussed in the lecture component and students implement elements of the process in various laboratory exercises. This course is one of three courses in the biology series designed for biology majors, including those students planning to pursue a career in medicine, dentistry, or other life sciences.

BIOL 102H - Honors Principles of Biology II

5 units

3 hours lecture, 6 hours lab

Prerequisite: CHEM 1A with minimum grade of C or equivalent

Recommended Preparation: eligibility for ENGL 1A or ENGL 1AH

Credit, degree applicable

Transfer CSU

This honors course, intended for students in the Honors Transfer Program, offers a detailed study of eukaryotic cell anatomy, metabolism, and division, including the study of Mendelian genetics and the molecular genetics of eukaryotes. Prokaryotic cellular structure (eubacteria and archaea), microbial genetics, and viruses are also studied. The scientific method is discussed in the lecture component and students implement elements of the process in various laboratory exercises. This course is one of three courses in the biology series designed for biology majors, including those students planning to pursue a career in medicine, dentistry, or other life sciences. This course is enriched through extensive rigorous reading, writing, and research assignments.

Note: Students may take either BIOL 102 or Biology 102H. Duplicate credit will not be awarded for BIOL 102 and Biology 102H.

BIOL 103 - Fundamentals of Molecular Biology

3 units

3 hours lecture

Prerequisite: BIOL 101 or BIOL 101H and BIOL 102 or BIOL 102H with a minimum grade of C in each course CHEM 7A with a minimum grade of C or concurrent enrollment

Credit, degree applicable

Transfer CSU, UC

This course is an introduction to molecular biology. The student will study DNA, RNA and protein structure; protein biochemistry; protein purification and analysis; genome organization of viruses, prokaryotes and eukaryotes; DNA replication; transcription and splicing; regulation of transcription; translation; and recombinant DNA technology. The student will also explore the uses of DNA technology, such as forensics and agriculture, as well as the ethical considerations of these uses.

BUS 1A - Financial Accounting

4 units

4 hours lecture, 1 hour lab

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU*, UC

This is an introductory course covering the fundamental theory, principles, and procedures of financial accounting with an emphasis on the corporate entity. Topics include ethics and the analysis, recording, and summarizing of accounting transactions on the accrual basis. Financial statements are prepared and analyzed. An emphasis will be on accounting as an information system to meet the demands of users for decision-making. Computer applications are integrated into the homework.

Note: Transfer limitations apply.

BUS 1B - Managerial Accounting

4 units

4 hours lecture, 1 hour lab

Prerequisite: BUS 1A with a minimum grade of C

Credit, degree applicable

Transfer CSU*, UC

This course emphasizes advanced accounting theory, principles and practices for the corporation form of ownership. A major focus of the course is on managerial, cost, and manufacturing accounting and related issues in the corporate environment.

Note: Transfer limitations apply.

BUS 2A - Intermediate Accounting

3 units

3 hours lecture

Prerequisite: BUS 1B with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course emphasizes advanced financial accounting theory and practice for the corporate form of ownership. A major focus of the course is on the preparation and analysis of complex financial statements, notes and special reporting issues.

BUS 2B - Intermediate Accounting

3 units

3 hours lecture

Prerequisite: BUS 2A with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course is a continuation of the study of advanced financial and managerial accounting theory and practice for the corporate form of ownership. The emphasis of the course is on the analysis, evaluation, and preparation of complex corporate financial statements including notes, special topics, and extenuating circumstances and the resulting reporting issues.

BUS 3 - QuickBooks

2 units

1.5 hours lecture, 1.5 hours lab

Credit, degree applicable

Transfer CSU

In this course, students will be introduced to basic financial record keeping software using the double-entry system for recording transactions. Emphasis will be placed on how to use the accounting application software in a small business environment.

Note: Letter grade or pass/no pass option.

BUS 4 - Cost Accounting

3 units

3 hours lecture

Prerequisite: BUS 1B with a minimum grade of C or equivalent experience

Credit, degree applicable

Transfer CSU

This course emphasizes the theory and practice of cost accounting and cost procedures used in business and industry. Major topics include job order, process costing, and standard cost methods.

BUS 5A - Income Tax Accounting

4 units

4 hours lecture

Prerequisite: BUS 1A with a minimum grade of C or equivalent experience

Credit, degree applicable

Transfer CSU

This course emphasizes income tax regulations pertaining to individual and business income tax reporting. Major topics include income inclusions, exclusions, exemptions, capital gains and losses, and business and individual deductions.

BUS 11 - Accounting for Small Business

3 units

3 hours lecture

Recommended Preparation: ENGL 82 and ENGL B

Credit, degree applicable

Transfer CSU

This course addresses the accounting cycle for a small business. Topics covered include the fundamental accounting equation, types of accounts, debits and credits, the trial balance, the general journal, general ledger and preparation of financial statements. Adjusting entries, closing entries, and the post-closing trial balance will be prepared. Additional topics in this course include cash, cash controls, payroll, and employer taxes. This is an accounting course for small business in service environments.

Note: This course is not open to students who have credit for or are currently enrolled in BUS 1A. This course is not recommended for the student who has completed two years of high school bookkeeping with a grade of C or better.

BUS 12 - Advertising

3 units

3 hours lecture

Recommended Preparation: ENGL 82 and ENGL B

Credit, degree applicable

Transfer CSU

In this course, students will study how to create effective and compelling advertising campaigns through print, broadcast, and electronic media. Topics to be covered include the branding, message creation, and media placement. Also emphasized are the concepts of ethics, social responsibility, and consumer benefits.

BUS 14 - Marketing

3 units

3 hours lecture

Recommended Preparation: ENGL 82 and ENGL B

Credit, degree applicable

Transfer CSU

This course is an introduction to marketing principles and explores marketing concepts and strategies. Topics include market analysis, planning, product development, marketing mix, and media decisions. Electronic marketing and the environmental factors of marketing including social, ethical, and legal considerations are also studied.

Note: Letter grade or pass/no pass option.

BUS 15 - Business Mathematics

3 units

3 hours lecture

Prerequisite: MATH 40

Credit, degree applicable

This course is designed to prepare students for mathematical concepts involving quantitative reasoning and analysis in management, finance, accounting, real estate, and other areas of business. The course content involves a thorough study of all aspects of business mathematics including computational skills, percentages, bank reconciliation, use of business formulas and equations, payroll, discounts, and markup/markdowns, simple and compound interest, present values analysis, annuities and sinking funds, credit, depreciation and inventory, payroll taxes, promissory notes, insurance, financial reports, and business statistics.

BUS 17 - Personal Finance

3 units

3 hours lecture

Prerequisite: MATH 40

Credit, degree applicable

Transfer CSU

In this course, students will learn how to develop personal financial goals and how to use financial planning to help achieve life goals. Students will learn budgeting, planning for the financial future, and how to incorporate investment choices such as stocks, real estate, bonds, and mutual funds. Students will examine how personal financial management impacts individuals and families and how to calculate the financial impacts of their decisions.

BUS 19 - Principles of Retailing Management

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 84 and eligibility for ENGL A

Credit, degree applicable

Transfer CSU

This course examines the principles and practices used in the management of successful retail stores. Topics include site selection, layout, merchandising, staffing, positioning, customer service, promotional techniques, and all aspects of the critical buying function.

Note: Letter grade or pass/no pass option.

BUS 20 - Business Management

3 units

3 hours lecture

Recommended Preparation: ENGL 82 and ENGL B

Credit, degree applicable

Transfer CSU

This course is a study of the concepts and procedures critical to managing a business successfully in a global, competitive environment. Planning, organizing, leading, controlling, and the application of managerial concepts are discussed.

Note: Letter grade or pass/no pass option.

BUS 21 - Human Resources Management

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 84 and eligibility for ENGL A

Credit, degree applicable

Transfer CSU

This course is a study of effective utilization of human resources within an organization. Emphasis is placed on principles of human resources strategy and planning, recruitment, selection, training and development, employee appraisals, compensation and benefits, legal considerations, organized labor, and health and safety practices. Effective management of common issues in human resources from the perspective of the employee and employer are discussed.

BUS 22 - Human Relations in Organizations

3 units

3 hours lecture

Recommended Preparation: ENGL 82 and ENGL B

Credit, degree applicable

Transfer CSU

This course covers the major themes of human relations in organizations and the workplace from a psychological, sociological, and physiological perspective. Students will develop critical thinking and ethical reasoning skills as students apply behavior science theories and principles. Topics include values, perception, motivation, conflict management, teamwork, and leadership.

BUS 24 - Small Business Entrepreneurship

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 84 and eligibility for ENGL A

Credit, degree applicable

Transfer CSU

This course provides students with the ability to identify opportunities and develop them into viable small businesses or non-profit organizations. Students will focus on building the entrepreneurial skills needed to initiate and manage a small business or small organization. Areas of concentration include product development, acquiring financing, drafting a business plan, advertising, accounting, legal forms of organizations, and strategic planning.

Note: Letter grade or pass/no pass option.

BUS 25 - Introduction to Business

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 84

Credit, degree applicable

Transfer CSU, UC

This course is a survey of organization and management factors influencing the establishment, location, and operation of businesses. This course emphasizes the functional area of accounting as well as the legal framework within which business activities are conducted. The course also emphasizes the principles of Total Quality Management (TQM) in a multicultural and globalized environment.

Note: Letter grade or pass/no pass option.

BUS 27 - Effective English for Business

3 units

3 hours lecture

Prerequisite: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This course is a study of written English skills that are critical to communicate successfully in a business environment. Focus is placed on English grammar, usage, and sentence structure.

BUS 28 - Written Business Communications

3 units

3 hours lecture

Prerequisite: ENGL 1A with a minimum grade of C

Credit, degree applicable

Transfer CSU

In this course, students will study the theory and practice of functional writing to provide a better understanding of the human relations aspects of communication, develop logical patterns of organizing ideas, and achieve clear, concise expression in written form. Students will prepare formal and informal written reports in various types of business communication utilizing appropriate inductive and deductive methods and incorporating considerations for ethical and legal implications. Understanding critical thinking techniques and the problems associated with logical fallacies will be emphasized throughout the course.

BUS 29 - Oral Business Communications

3 units

3 hours lecture

Recommended Preparation: ENGL B

Credit, degree applicable

Transfer CSU

In this course, students will compose and deliver original business presentations with focus on effective speaking in business situations. The course will focus on techniques of research, preparation, presentation, and evaluation. Various business formats including interviewing, delivering formal business presentations, speaking within a small group and interpersonal conversations, impromptu speaking and briefings will be covered.

Note: Business 29 is the same course as SUPV 27.

BUS 36 - New Venture Creation

2 units

2 hours lecture

Recommended Preparation: ENGL 82 and ENGL B

Credit, degree applicable

Transfer CSU

In this course, students will learn the strategies and tactics necessary to compose a comprehensive business plan. Students will use their unique product or service concept and develop all components of a successful plan including legal form of ownership, sales forecasts, operational plan, marketing plan, financial analysis and forecasts, and organizational structure.

Note: Letter grade or pass/no pass option.

BUS 40 - Career Planning

2 units

2 hours lecture

Recommended Preparation: ENGL C

Credit, degree applicable

Transfer CSU

This course will introduce students to personal career planning concepts. Through course readings and activities, students will learn how to identify employment trends in the marketplace, gain perspective on employer hiring practices, and develop an understanding of application processes. Students will write and refine their personal marketing materials in the forms of resume, cover letter, social media, and other correspondence. Emphasis will be placed on getting an interview, understanding typical interview processes, and developing conversational interview skills.

BUS 43 - Business Office Administration

3 units

3 hours lecture

Recommended Preparation: ENGL B

Credit, degree applicable

Transfer CSU

This course is designed to introduce business office administration, including the internal activities within the workplace. Topics include customer service, communications, workflow management, records management, and business ethics. In addition, students are introduced to critical professional skills such as leadership, working with teams, self-management, and personal career advancement.

Note: This course is only offered in the fall semester.

BUS 60A - Microcomputer Keyboarding I

1 unit

0.5 hour lecture, 1.5 hours lab

Credit, degree applicable

Transfer CSU

In this course, the student will learn the touch keyboarding method for alphabetic and numeric/symbol keys on microcomputers with an emphasis on developing acceptable speed (40 net words a minute) and accuracy levels. This course is recommended for student who need to develop speed and accuracy skill for person or business use.

Note: Letter grade or pass/no pass option.

BUS 60B - Microcomputer Keyboarding II and Document Processing

1 unit

0.5 hour lecture, 1.5 hours lab

Prerequisite: BUS 60A with a minimum grade of C or equivalent skill experience

Credit, degree applicable

Transfer CSU

In this course, the student will use a word processing program to further increase keyboarding speed (60 net words a minute) and improve accuracy. Additionally, students will learn to prepare documents such as correspondence, memorandum, business letters, reports, and tables. This course is recommended for students who need to develop speed and accuracy skill as well as document formatting proficiency for personal or business use.

Note: Letter grade or pass/no pass option.

BUS 74 - New Media Marketing

3 units

3 hours lecture

Recommended Preparation: ENGL 82 and ENGL B

Credit, degree applicable

Transfer CSU

This course focuses on the application of technologies when marketing to consumers and businesses. Emphasis is placed on the use of mobile technologies, apps, and websites to support strategic business goals. Content marketing, email marketing, search engine marketing, and social media are covered as part of an integrated online marketing campaign. The course also examines how digital marketing integrates with traditional marketing techniques.

BUS 95 - Cooperative Work Experience Education

2-4 units

10-20 hours lab per week to be arranged

Enrollment Limitation: Employment or volunteer work in a position related to the student's major or career goal by the second week of the semester. Completion of or current enrollment in one course from the major.

Credit, degree applicable

Transfer CSU*

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Business field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations

Note: *Transfer limitations apply. The total units earned for Cooperative Work Experience Education may not exceed 16 units. (formerly Business 95abcd)

BUS 99 - Independent Study

1-3 units

hours to be arranged

Enrollment Limitation: two courses in Business with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work

Credit, degree applicable

Transfer CSU*

This course provides special advanced studies in a subject field of Business not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Business projects (54 hours per unit).

Note: *Transfer limitations apply. For eligibility requirements, go to www.elcamino.edu/admissions/credit.asp (formerly Business 99abc)

CHEM 1A - General Chemistry I

5 units

5 hours lecture, 4 hours lab

Prerequisite: (1) CHEM 4 with a minimum grade of C or CHEM 4H or 1 year of high school chemistry and qualification by testing (El Camino College Chemistry Placement Test) and assessment (2) eligibility for MATH 170 or qualification by testing (El Camino College Mathematics Placement Test) and assessment

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course details fundamental theory and principles of atomic and molecular structure, physical states and chemical reactions. Included is the study of elements, compounds, periodic relationships, bonding, acids and bases, oxidation-reduction, energy, solutions, electrolytes and chemical equations. Descriptive chemistry of water and selected nonmetals including hydrogen, oxygen and carbon is presented.

CHEM 1B - General Chemistry II

5 units

5 hours lecture, 4 hours lab

Prerequisite: CHEM 1A with a minimum grade of C

Recommended Preparation: eligible for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course details the chemistry of elements and their compounds in periodic groupings, transition metal complexes, chemical equilibrium, chemical thermodynamics, kinetics, aqueous solutions, net ionic equations, oxidation - reduction equations, electrochemistry and nuclear processes. In the laboratory, qualitative analysis of common metallic and nonmetallic ions will be performed, as well as additional experiments on selected lecture topics.

CHEM 4 - Beginning Chemistry

5 units

5 hours lecture, 4 hours lab

Prerequisite: MATH 80 with a minimum grade of C or equivalent or qualification by testing (El Camino College Mathematics Placement Test) and assessment

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC*

This course introduces the principles of chemistry, modern concepts of atomic structure and periodicity as a basis for understanding bonding, chemical formulas, chemical equations and chemical reactions, states of matter, important elements and their compounds, solutions, acid-base theories and reactions, net ionic equations, oxidation-reduction, kinetics and chemical equilibrium, chemical nomenclature and calculations. In the laboratory, emphasis is on observations, measurements, and elementary quantitative experiments with an introduction to qualitative analysis.

Note: The maximum UC credit allowed for students completing Chemistry 4 and CHEM 20 is one course. Students will not receive UC credit for Chemistry 4 if taken after CHEM 1A.

CHEM 4H - Honors Beginning Chemistry

5 units

5 hours lecture, 4 hours lab

Prerequisite: MATH 80 with a minimum grade of C or equivalent, or qualification by testing (El Camino College Mathematics Placement Test and assessment.

Recommended Preparation: eligibility for ENGL 1A or ENGL 1AH

Credit, degree applicable

Transfer CSU

This honors course, intended for students in the Honors Transfer Program, introduces the principles of chemistry, modern concepts of atomic structure and periodicity as a basis for understanding bonding, chemical formulas, chemical equations and chemical reactions, states of matter, important elements and their compounds, solutions, acid-base theories and reactions, net ionic equations, oxidation-reduction, kinetics, and chemical equilibrium, chemical nomenclature, and calculations. Historical and current chemical concepts will be investigated in a required research paper. In the laboratory, emphasis is on observations, measurements, and elementary quantitative experiments with an introduction to qualitative analysis. This course is enriched through extensive rigorous reading, writing, and research assignments.

Note: Students may take either CHEM 4 or Chemistry 4H. Duplicate credit will not be awarded for CHEM 4 and Chemistry 4H

CHEM 7A - Organic Chemistry I

5 units

3 hours lecture, 6 hours lab

Prerequisite: CHEM 1B with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course involves a comprehensive study of the major classes of aliphatic hydrocarbons and of organic halides, alcohols and ethers. This includes nomenclature, structure, properties, stereochemistry, reactions, synthetic methods, and spectroscopy. Emphasis is placed on a systematic approach to understanding the material through the use of bonding theories, energy concepts, kinetics, and reaction mechanisms. In the laboratory, emphasis is on techniques of separation and purification of organic compounds, common organic reactions, and spectroscopy.

CHEM 7B - Organic Chemistry II

5 units

3 hours lecture, 6 hours lab

Prerequisite: CHEM 7A with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course involves a comprehensive study of aromatic compounds and the major classes of oxygen-containing and nitrogen-containing organic compounds. This includes nomenclature, structure, properties, stereochemistry, reactions, synthetic methods, and spectroscopy. Emphasis is placed on a systematic approach to understanding the material through the use of bonding theories, energy concepts, kinetics, and reaction mechanisms. A study of biochemistry focuses primarily on lipids, carbohydrates, amino acids and proteins. In the laboratory, emphasis is on qualitative organic analysis, common organic reactions, and multistep synthesis.

CHEM 20 - Fundamentals of Chemistry

5 units

4 hours lecture, 3 hours lab

Prerequisite: MATH 40 or Mathematics 43 with a minimum grade of C in prerequisite or qualification by testing (El Camino College Mathematics Placement Test) and assessment

Recommended Preparation: ENGL 84

Credit, degree applicable

Transfer CSU, UC*

This course introduces fundamental theory and principles of chemistry applied to inorganic, organic, and biological chemistry. Atomic and molecular structure, chemical and physical changes, gases, solutions, nomenclature, equations and calculations will be emphasized.

Note: The maximum UC credit allowed for students completing CHEM 4 and Chemistry 20 is one course. Students will not receive UC credit for Chemistry 20 if taken after CHEM 1A.

CHEM 21A - Survey of General and Organic Chemistry

4 units

4 hours lecture, 2 hours lab

Prerequisite: eligibility for MATH 80

Credit, degree applicable

Transfer CSU, UC*

The general chemistry topics in the course are units of measurement, atomic structure, the periodic table, inorganic formulas and nomenclature, chemical bonding, common chemical reactions, stoichiometry, states of matter, solutions, introduction to reaction rates and equilibrium, elementary acid-base theory and pH and buffers. The organic chemistry portion of the course studies the properties, nomenclature, common reactions and some reaction mechanisms for several classes of organic compounds. These classes include alkanes, alkenes, alkynes, alcohols, phenols and ethers. There is also an introduction to resonance and stereoisomerism. The emphasis in the laboratory is on observations and measurements.

Note: Students will not receive UC credit for Chemistry 21A if taken after CHEM 1A or CHEM 7A.

CHEM 21B - Survey of Organic and Biochemistry

4 units

4 hours lecture, 2 hours lab

Prerequisite: CHEM 21A with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC*

The study of organic chemistry continues with the nomenclature, properties, preparation, reactions and derivatives of carboxylic acids, amines, aldehydes and ketones. Principles of biochemistry are introduced. Descriptions of the structures and biochemical reactions of carbohydrates, lipids, proteins, enzymes and nucleic acids will be analyzed. Catabolic/anabolic pathways as well as the energy consumed or produced by the metabolism of carbohydrates, fats and proteins will be examined. The chemistry of photosynthesis will be studied.

Note: Students will not receive UC credit for Chemistry 21B if taken after CHEM 7B.

CHEM 99 - Independent Study - Introduction to Research

1-3 units

hours to be arranged

Enrollment Limitation: two Chemistry courses with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work

Credit, degree applicable

Transfer CSU*

This course provides special advanced studies in a subject field of Chemistry not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Chemistry projects (54 hours per unit).

Note: *Transfer limitations apply. For eligibility requirements, go to www.elcamino.edu/admissions/credit.asp (formerly Chemistry 99abc)

CDEV 103 - Child Growth and Development

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course is an introduction to child development from conception through adolescence with an emphasis on the interaction between the maturational processes and environmental factors relating to physical, cognitive, and psychosocial growth. While studying developmental theory and investigative research methodologies, students will observe and interview children, evaluate individual differences and analyze characteristics of development at various stages. Also, the effect of cultural influences on development will be studied.

Note: This is a core course for all teachers and assistants in early childhood programs regulated by the State of California.

CDEV 104 - The Home, The School, The Community

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course examines the interconnection among the development of the child from birth to adolescence in the home, the family, the school, and the community. Emphasis is placed on the importance of respectful, reciprocal relationships that support and empower families. Influences of social agents such as family support services, educational systems, media, and peers, and on how these social agents contribute in preparing the child for living independently in a diverse society will also be explored. Additional topics include parenting styles, schooling, roles of teachers, peers, the media, children with special needs, cultural influences on behavior, child abuse, neglect, and social policy.

Note: This is a core course for all teachers and assistants in early childhood programs regulated by the State of California.

CDEV 106 - Care and Education for Infants and Toddlers

3 units

3 hours lecture

Prerequisite: CDEV 103 with a minimum grade of C or concurrent enrollment

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

In this course, students will study the principles of inclusive and respectful care giving for infants and toddlers in relation to curriculum development and design. Students will apply current theory and research to the care and education of infants and toddlers in group settings as they study typical and atypical development of infants/toddlers. Essential policies, principles and practices that lead to quality care and developmentally appropriate curriculum for children birth to 36 months will be examined. Topics include current brain research, issues relating to health and safety, licensing requirements, observation techniques, assessment strategies, as well as ways to communicate with parents, implement home visits, and develop early intervention plans.

CDEV 107 - Infant/Toddler Development

3 units

3 hours lecture

Prerequisite: CDEV 103 with a minimum grade of C or concurrent enrollment

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

In this course, students will study infants and toddlers from pre-conception to age three including physical, cognitive, language, social, and emotional growth and development. Students will apply theoretical frameworks to interpret behavior and interactions between heredity and environment. Students will focus on the role of family, the effect of the adult-child relationship on an infant's development, practical applications of developmental theories in relation to infant/toddler group care, and the importance of demonstrating respectful and sensitive practices in relation to cultural differences in child care settings. Topics include developmentally appropriate environments, curriculum, and state-mandated licensing regulations.

CDEV 108 - Principles and Practices of Teaching Young Children

3 units

3 hours lecture

Prerequisite: CDEV 103 with a minimum grade of C or concurrent enrollment

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This course examines the underlying theoretical principles of developmentally appropriate practices applied to programs and environments. The key role of relationships, constructive adult-child interactions, and teaching strategies in supporting physical, social, emotional, creative, and cognitive development in young children will be emphasized. This course includes a review of the historical roots of early childhood programs and current philosophies and methodologies of early childhood education. Topics include observation, analysis, and assessment of young children's development, identification of effective teaching strategies, age appropriate environments, and professional ethics.

CDEV 110 - Child Health, Safety, and Nutrition

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This course is an introduction to the laws, regulations, standards, policies, procedures, and curriculum related to child health, safety, and nutrition in early childhood education. The key components that ensure physical health, mental health, and safety for both children and staff will be identified along with the importance of collaboration with families and health professionals. Topics include indoor and outdoor safety, chronic and acute illnesses, accident prevention, health screening, disaster planning, nutrition, contagious diseases, and identifying and working with children with special needs. Students will focus on integrating these concepts into everyday planning and program development throughout the curriculum for infants, toddlers, and preschool children. Students will develop and present health and safety education curriculum appropriate for children, staff, and parents.

CDEV 112 - Teaching Young Children in a Diverse Society

3 units

3 hours lecture

Prerequisite: CDEV 103 with a minimum grade of C or concurrent enrollment

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

In this course, students will examine the development of social identities in diverse societies including theoretical and practical implications of oppression and privilege as they apply to young children, families, programs, classrooms and teaching. Various classroom strategies will be explored emphasizing culturally and linguistically appropriate anti-bias approaches supporting all children in becoming competent members of a diverse society. Topics include self-examination and reflection on issues related to social identity, stereotypes and bias, social and educational access, and media and schooling.

CDEV 114 - Observing and Assessing Young Children

3 units

3 hours lecture

Prerequisite: CDEV 103 with a minimum grade of C or concurrent enrollment

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

In this course, students will examine the appropriate use of assessment and observational strategies for young children and document development, growth, play, and learning in order to work with families and professionals in promoting children's success and maintaining quality programs. Recording strategies, rating systems, portfolios, and multiple assessment methods will be explored. Students will analyze, through observation and research, common behavioral issues and the possible underlying influences on behavior. The role of the teacher in promoting an environment which fosters appropriate behavior will be examined. Students will be required to conduct observations in local school programs.

CDEV 115 - Introduction to Curriculum

3 units

3 hours lecture

Prerequisite: CDEV 103 with a minimum grade of C or concurrent enrollment

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This course presents an overview of knowledge and skills related to providing appropriate curriculum and environments for young children from birth to age six. Students will examine the teacher's role in supporting development and fostering an enthusiasm for learning for all young children using observation and assessment strategies emphasizing the essential role of play. An overview of content areas will include language and literacy, social and emotional learning, sensory learning, art and creativity, music and movement, and math and science.

CDEV 116 - Creative Art for Young Children

3 units

3 hours lecture

Prerequisite: CDEV 103 with a minimum grade of C or equivalent or concurrent enrollment

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This course focuses on the principles and methods of planning, presenting and evaluating creative art experiences for young children ages two to six in diverse settings. Emphasis will be placed on facilitating creativity, self-expression, and concept and skill development through the use of art media such as paint, clay, collage, chalk and woodworking. Methods for adapting creative art experiences for children with special needs will be discussed. The course is designed for teachers in training and teachers in service needing to develop and refine skills in understanding, planning, and implementing curriculum. Students will be required to participate in one structured activity related to children and/or professional development outside of class hours.

CDEV 117 - Music and Movement for Young Children

3 units

3 hours lecture

Prerequisite: CDEV 103 with a minimum grade of C or equivalent or concurrent enrollment

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This course focuses on the principles and methods of planning, presenting, and evaluating music and movement experiences for young children ages two to six. Activities, such as group singing, rhythmic experiences, perceptual motor, and creative movement, which foster the child's cognitive, psychosocial, and physical development will be presented. Methods for adapting music and movement experiences for children with special needs will be discussed. This course is designed for teachers in training and teachers in service needing to develop or refine skills in planning and implementing music and movement curriculum. Students will be required to participate in one structured activity related to children and/or professional development outside of class hours.

CDEV 118 - Science and Math for Young Children

3 units

3 hours lecture

Prerequisite: CDEV 103 with a minimum grade of C or equivalent or concurrent enrollment

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This course focuses on the principles and methods of planning, presenting, and evaluating science and math experiences for young children ages two to six. Students will develop activities that foster children's natural curiosity about scientific and mathematical concepts. These activities will be designed to encourage exploration, experimentation, problem solving, and discovery. Methods for adapting science and math experiences for young children with special needs will also be discussed. This course is designed for teachers in training and teachers in service needing to develop or refine skills in understanding, planning, and implementing developmentally appropriate science and math curriculum. Students will be required to participate in one structured activity related to children and/or professional development outside of class hours.

CDEV 119 - Language Arts for Young Children

3 units

3 hours lecture

Prerequisite: CDEV 103 with a minimum grade of C or equivalent or concurrent enrollment

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This course focuses on the principles and methods of planning, presenting and evaluating language arts activities for young children ages two to six. Appropriate activities for expressive and receptive language development such as storytelling, dramatic play, listening, and emergent literacy will be examined. Methods for adapting language experiences for children with special needs will be discussed. This course is designed for teachers in training and teachers in service needing to develop or refine skills in planning and implementing language arts curriculum. Students may be required to participate in one structured activity related to children and/or professional development outside of class hours.

CDEV 125 - Child Development Practicum I

3 units

2 hours lecture, 3 hours lab per week to be arranged

Prerequisite: CDEV 103 and CDEV 104 one course from CDEV 115, CDEV 116, CDEV 117, CDEV 118 or CDEV 119 with a minimum grade of C in prerequisite

Credit, degree applicable

Transfer

This course provides a practical application of learning theories in early childhood education programs. Students will design, implement, and evaluate experiences that promote positive development and learning for all young children and will observe and interact with children and staff in supervised child care settings. The course includes methods of working effectively with children, observation and guidance techniques, the role of the preschool teacher and classroom assistant, effective communication with staff and parents, educational requirements and techniques for gaining employment in the field.

Note: Students are required to have proof of a current (within 2 years) negative TB test. LiveScan at the practicum site may also be required. Students are responsible for paying these fees.

CDEV 126 - Child Development Practicum II

3 units

2 hours lecture, 3 hours lab per week to be arranged

Prerequisite: CDEV 104, CDEV 108 CDEV 150 CDEV 152 or CDEV 152 and two courses from CDEV 115, CDEV 116, CDEV 117, CDEV 118 or CDEV 119 with a minimum grade of C in prerequisite. One of these courses may be taken concurrently with Child Development 126.

Credit, degree applicable

Transfer CSU

In this course, students will apply and implement developmental teaching theories in an early childhood education setting under guided supervision. The course includes planning, demonstrating, and evaluating learning experiences for children. This course covers aspects of teaching such as strategies for working with children and adults, classroom management skills, program philosophies, and techniques for gaining employment.

Note: Students are required to have proof of a current (within 2 years) negative TB test. LiveScan at the practicum site may also be required. Students are responsible for paying these fees.

CDEV 129 - Introduction to Program Administration

3 units

3 hours lecture

Prerequisite: CDEV 125 or CDEV 126 with a minimum grade of C in prerequisite or 50 days of preschool teaching experience within the past two years

Credit, degree applicable

Transfer CSU

This course offers an introduction to the administration of early childhood programs and focuses on the regulations, standards and practices for licensed preschool programs. Program types, budgeting, management, regulations, laws, as well as the development and implementation of policies and procedures, are presented. Topics include the role of the program director, interpersonal relationships, public relations, staff recruitment and selection, and community resources. Students will examine administrative tools, philosophies, and techniques needed to organize, open, and operate an early care and education program.

CDEV 130 - Principles of Program Administration

3 units

3 hours lecture

Prerequisite: CDEV 125 or CDEV 126 with a minimum grade of C in prerequisite or concurrent enrollment or 50 days of preschool teaching experience within the past two years

Credit, degree applicable

Transfer CSU

This course emphasizes the role of the director in child care programs. Topics include legislative policies, legal and ethical responsibilities, supervision techniques, fiscal management, leadership styles, professional development and reflective practices. Effective communication strategies for working with staff and parents, as well as personnel management and leadership, in diverse and inclusive early care and education programs, will also be discussed.

CDEV 131 - Supervising and Mentoring Adults

3 units

3 hours lecture

Prerequisite: CDEV 125 or CDEV 126 with a minimum grade of C or concurrent enrollment or 50 days of preschool teaching experience within the past two years

Credit, degree applicable

Transfer CSU

In this course, students will study the principles and practices of supervising and evaluating student teachers, volunteers, staff, and other adults in early care and education settings. Topics will include balancing the needs of children, families and staff, ethics, advocacy, and professionalism in the field. Emphasis will be placed on the development of early childhood professionals as mentors and leaders.

Note: This course fulfills the adult supervision requirement for the Child Development Permit and the California Early Childhood Mentor Teacher Program.

CDEV 150 - Introduction to Children with Special Needs

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This course offers an overview of the causes, characteristics, prevalence, and needs of children with mild to severe physical, cognitive, and behavioral conditions from birth to age 22 with an emphasis on children ages birth through eight. Students are introduced to the variations in development of children with special needs and the resulting impact on families. An overview of historical and societal influences, laws relating to children with special needs, and the identification and referral process is also examined. Topics include the identification of community agencies for referral and case management, inclusion of children with special needs into mainstream classrooms, and the special needs of gifted and talented children.

CDEV 152 - Curriculum and Strategies for Children with Special Needs

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

In this course, students will study curriculum and intervention strategies for working with children with special needs. Focus will be placed on the use of observation and assessment in meeting the individualized needs of children in inclusive and natural environments. The role of the teacher, the special education assistant, and the in-home respite care provider will be emphasized. Topics include working in partnership with families, designing curriculum and accommodations, collaborating with interdisciplinary teams, and developing cultural competence and responsiveness.

CDEV 165 - Autism, ADHD, Physical and Health Impairments

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This course is designed for students interested in working as a paraprofessional with children who have been diagnosed with autism, Attention Deficit Disorder (ADD) or Attention Deficit Hyperactivity Disorder (ADHD), children with physical disabilities, and health impairments. Students will be introduced to the social, emotional, cognitive, and academic needs of these children. The causes, signs, symptoms, treatments, and implications of these disorders will be presented. The characteristics of effective teaching methods and the implementation of accommodation strategies in the home and school setting will be explored. The laws governing the rights of children with special needs and their families will be discussed. Students may be required to observe local programs that serve children with special needs.

CDEV 169 - Special Education Practicum

3 units

2 hours lecture, 3 hours lab per week to be arranged

Prerequisite: CDEV 150 or CDEV 152; CDEV 104, CDEV 107, CDEV 108, and CDEV 110; CDEV 115 or CDEV 116 or CDEV 117 or CDEV 118 or CDEV 119 with a minimum grade of C in prerequisite

Credit, degree applicable

Transfer CSU

This practicum provides students with supervised experience working with infants, toddlers, and young children with special needs in a variety of early intervention and education settings, such as self-contained or fully-included day care programs, regional centers, or early childhood classrooms. Students will assist in the planning and implementation of intervention strategies and will work collaboratively with families as well as early intervention and special education professionals. Students will develop communication skills that are culturally sensitive towards the unique needs of children and families of children with special needs.

Note: Students are required to have proof of a current (within 2 years) negative TB test. LiveScan at the practicum site may also be required. Students are responsible for paying these fees.

CHIN 1 - Elementary Chinese I

4 units

5 hours lecture

Recommended Preparation: eligibility for ENGL A

Credit, degree applicable

Transfer CSU, UC

This course introduces and develops students' skills for language acquisition in listening, speaking, reading, and writing Mandarin Chinese. Students also are introduced to the cultural background of the language. Technological support and tutorial services enhance the course.

Note: This course is comparable to two years of high school Chinese.

CHIN 2 - Elementary Chinese II

4 units

5 hours lecture

Prerequisite: CHIN 1 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC

This course, taught within the context of Chinese culture, is a continuation of the study of elementary Mandarin Chinese through intensive practice in listening, speaking, reading, and writing. Students improve their oral communication skills and extend their study of the basic grammar, vocabulary, and Chinese characters. Technological support and tutorial services enhance the course.

Note: The prerequisite for this course is comparable to two years of high school Chinese.

CHIN 3 - Intermediate Chinese I

4 units

5 hours lecture

Prerequisite: CHIN 2 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC

In this intermediate course, taught within the context of Chinese culture, students develop their functional communication skills in Mandarin Chinese through listening, speaking, reading, and writing practice. Students expand their knowledge of the Chinese language and culture. Students read material drawn from daily Chinese life.\

Note: The prerequisite for this course is comparable to three years of high school Chinese.

CHIN 21 - Beginning Conversational Chinese

2 units

2 hours lecture

Prerequisite: CHIN 1 with minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

This course is designed to develop competency in oral expression, oral comprehension, and conversational strategies. Students will learn how to converse in various situations such as business, travel, and dining within the context of Chinese culture.

(formerly Chinese 21ab)

CHIN 22 - Intermediate Conversational Chinese

2 units

2 hours lecture

Prerequisite: CHIN 2 and CHIN 21 with a minimum grade of C in prerequisite or equivalent

Credit, degree applicable

Transfer CSU, UC

This course is designed for the intermediate student to develop fluency in oral expression, to increase oral comprehension and to improve pronunciation. Conversational topics are based upon the daily experiences and cultural life of the ethnic areas involved with the language.

(formerly Chinese 22ab)

CHIN 24 - Introduction to Chinese Language and Culture

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course provides an introduction to the cultural aspects of the Chinese language through a study of Chinese culture, geography, social institutions, literature, art, architecture, music, and business. Topics include comparison of Chinese and other Asian languages and cultures as well as comparison with Western languages and civilizations.

Note: This course is conducted in English.

CHIN 99 - Independent Study

1-3 units

hours to be arranged

Enrollment Limitation: two courses in Chinese with a minimum grade of B and acknowledgment by the instructor with whom the student will work

Credit, degree applicable

Transfer CSU*

This course provides advanced studies in a subject field of Chinese education not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Chinese education projects (54 hours per unit).

Note: *Transfer limitations apply. For eligibility requirements, go to www.elcamino.edu/admissions/credit.asp
(formerly Chinese 99abc)

COMS 99 - Independent Study

1-3 units

hours to be arranged

Enrollment Limitation: two courses in Speech Communication with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work

Credit, degree applicable

Transfer CSU*

This course provides special advanced studies in a subject field of Communication Studies not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Communication Studies projects (54 hours per unit).

Note: *Transfer limitations apply. For eligibility requirements, go to www.elcamino.edu/admissions/credit.asp (formerly Communication Studies 99abc)

COMS 100 - Public Speaking

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

In this course, students will compose, present, and evaluate original speeches. Emphasis is placed on audience analysis, topic selection, research, evidence, organization, delivery, and critical analysis of persuasive communication. Students are required to attend out-of-class speaking events.

(formerly Communication Studies 1)

COMS 120 - Argumentation and Debate

3 units

3 hours lecture

Prerequisite: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course introduces students to the construction of arguments for debate and other speech presentations. Emphasis is placed on analyzing claims, developing arguments that support and refute propositions, and effective delivery. Identification of types of argument and fallacies of reasoning are explored. Controversial issues are discussed, researched, and debated.

(formerly Communication Studies 4)

COMS 130 - Interpersonal Communication

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

In this course, students study and apply methods and theories of interpersonal communication such as self-concept, perception, emotions, language and gender differences, nonverbal communication, listening, intimacy, defensiveness, and conflict resolution. Students are required to give formal and informal oral presentations and write reports.

(formerly Communication Studies 12)

COMS 140 - Small Group Communication

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

In this course, students plan and participate in a variety of group projects, such as panel and symposium discussions. Topics include decision making, role identification, interpersonal needs within a group, team participation, appropriate interdependency on group members, effective leadership skills, cohesiveness, conflict resolution and professional presentation styles.

(formerly Communication Studies 3)

COMS 250 - Oral Interpretation of Literature

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

In this course, students will study how to orally interpret literature through reading poetry, drama, short stories, and essays. Emphasis will be placed on the techniques of exploring, illuminating, and orally presenting the logical, emotional, and aesthetic meanings of literature.

(formerly Communication Studies 8)

COMS 260 - Introduction to Intercultural Communication

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course examines general communication principles and cross-cultural communication styles, and presents in-class activities to enhance cross-cultural communication.

(formerly Communication Studies 14)

COMS 265 - Mass Communication

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC*

In this course, students study the history, effects, and role of the mass media in U.S. society. Topics include major forms of mass communication such as television, radio, cinema, print and new media. Emphasis is placed on analyzing media messages and the effects of media on the individual and U.S. culture.

Note: The maximum UC credit allowed for students completing Communication Studies 265 and JOUR 12 is one course.

(formerly Communication Studies 5)

COMS 270 - Organizational Communication

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This course examines the theories, methods and practices of communication that contribute to productivity and efficiency in private and public organizations. Emphasis is placed on the social science implications of communication and includes topics such as internal and external communication, interpersonal and group processes, and international communication.

(formerly Communication Studies 11)

COMS 275 - Gender Communication

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This course is an examination of communication patterns existing between males and females. The course is designed to integrate theory and practice, and to heighten students' awareness of the importance of gender as a communication variable. Emphasis is placed on perception, verbal and nonverbal communication in interpersonal, small group and public settings. Communication problems relating to gender are addressed along with listening, assertiveness, negotiation and other conflict management strategies.

COMS 290abcd - Forensics - Winter Events

1 unit

3 hours lab

Enrollment Limitation: audition Credit, degree applicable

Recommended Preparation: COMS 293abcd

Transfer CSU

This course provides training for and participation in winter forensics events at winter intercollegiate speech competitions. Students receive instruction and direction for the preparation, creation, and delivery of various speech, debate, and performance styles offered at winter forensics competitions. All students will compete in winter intercollegiate forensics competitions.

(formerly Communication Studies 25abcd)

COMS 292abcd - Forensics - Individual Events

2 units

1 hour lecture, 3 hours lab

Enrollment Limitation: audition

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This course provides training for and participation in individual forensics events at intercollegiate speech competitions. The student will receive instruction and direction for the preparation, creation, and performance of interpretation of literature programs, limited preparation speeches, and general public address. Students will compete in intercollegiate forensics competitions.

(formerly Communication Studies 22abcd)

COMS 293abcd - Forensics - Team Events

2 units

1 hour lecture, 3 hours lab

Enrollment Limitation: audition

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This course provides Team Forensics events training for and participation in intercollegiate forensics competitions. The student will receive instruction and direction for the creation and performance of Readers Theater. Students will receive instruction and preparation for current event debates and Limited Preparation Parliamentary Debate. Students will compete in intercollegiate forensics competitions.

(formerly Communication Studies 23abcd)

CADD 5 - Introduction to Mechanical Drafting

3 units

2 hours lecture, 4 hours lab

Credit, degree applicable

Transfer CSU

This introduction to mechanical drafting covers the basics of creating technical drawings using traditional manual drafting instruments and sketching and Computer Aided Design/Drafting (CADD) using AutoCAD software. Topics include lettering, sketching multiview drawings, geometric construction, computer and orthographic CADD, Two Dimensional (2D) and basic Three Dimensional (3D) computer drawings, threads and fasteners and working and assembly drawings using CADD software.

CADD 7 - Solid Modeling, Assemblies and Two Dimensional (2D) Drawings

3 units

2 hours lecture, 4 hours lab

Recommended Preparation: CADD 5 or one year of high school drafting or industry experience

Credit, degree applicable

Transfer CSU, UC

In this course, students create two-dimensional (2D) sketches, three-dimensional (3D) wireframe and solid models. Models or assemblies are displayed on a 2D drawing format and orthographically projected with dimensions added. Shading, rendering and solid model modifications are also available in the 2D mode. Auxiliary, detail and section views are also created with the use of the place view toolbar and its commands. This course utilizes Autodesk Inventor Pro software (Inventor Pro).

(formerly Computer Aided Design/Drafting 10abcd)

CADD 28 - Parametric Three Dimensional (3D) Modeling and Assemblies

2 units

1 hour lecture, 3 hours lab

Credit, degree applicable

Transfer CSU

In this course, students create Three-Dimensional (3D) models, assemblies, orthographic Two-Dimensional (2D) drawings with dimensions, detail, auxiliary and section views. Students will also create exploded animated assemblies (motion study). This course utilizes Dassault SolidWorks software (SolidWorks).

(formerly Computer Aided Design/Drafting 28abcd)

CADD 31 - Orientation to CATIA

2 units

1 hour lecture, 3 hours lab

Recommended Preparation: CADD 5 or equivalent

Credit, degree applicable

Transfer CSU

This course provides an orientation to and an overview of the CATIA* Computer Aided Design (CAD)/Computer Aided Manufacturing (CAM) system. Emphasis is on system structure and Three-Dimensional (3-D) geometry creation and manipulation. Most 3-D work is done as solid models based on wireframe profiles created on sketch planes. Basic assemblies and basic drafting techniques are also covered. (*CATIA is a registered trademark of Dassault Systems.)

(formerly Computer Aided Design/Drafting 31abcd)

CADD 32 - Product Modeling with CATIA

2 units

1 hour lecture, 3 hours lab

Recommended Preparation: CADD 31

Credit, degree applicable

Transfer CSU

In this course, students develop advanced solid and surface modeling techniques available within CATIA* software with emphasis on its assembly development aspects. Functions of the part design, generative shape, and drafting modules are also covered in depth. (*CATIA is a registered trademark of Dassault Systems.)

(formerly Computer Aided Design/Drafting 32abcd)

CADD 33 - Analyses and Simulations with CATIA

2 units

1 hour lecture, 3 hours lab

Recommended Preparation: CADD 31

Credit, degree applicable

Transfer CSU

This course explores the analysis and simulation features of CATIA*. Subjects include knowledgeware, kinematic analysis, generative stress analysis, and other Computer Aided Engineering (CAE) functions. (*CATIA is a registered trademark of Dassault Systems.)

(formerly Computer Aided Design/Drafting 33abcd)

CADD 37 - Advanced CATIA Functions

2 units

1 hour lecture, 3 hours lab

Recommended Preparation: CADD 31

Credit, degree applicable

Transfer CSU

This course covers wireframe and surface functionality using CATIA* software. Advanced Three Dimensional (3D) surface models are created, manipulated, analyzed and rendered. Additional instruction covers hybrid design utilizing solid and surface 3D models. (*CATIA is a registered trademark of Dassault Systems.)

(formerly Computer Aided Design/Drafting 37abcd)

CADD 43 - Design Process and Concepts

4.5 units

3 hours lecture, 5 hours lab

Prerequisite: CADD 7 or CADD 28 or CADD 31 with a minimum grade of C in prerequisite or equivalent

Credit, degree applicable

Transfer CSU, UC

This advanced design and drafting course addresses the processes of product design, from concept through final production drawings. Documentation requirements for each step includes: design requirements definition, conceptual design, design evaluation/refinement, preliminary design, detail design, and final production documentation. Industry practices are stressed throughout the course as students develop skills in conceptual sketching, orthographic projection, dimensioning and tolerancing, and drawing notes. Research, planning and sketching are done manually, while formal drawings are prepared on a personal computer utilizing appropriate Computer Aided Design/Drafting (CADD) software.

CADD 45 - Geometrical Dimensioning and Tolerancing

3 units

3 hours lecture

Credit, degree applicable

Transfer CSU

This course covers the application and interpretation of Geometric Dimensioning and Tolerancing (GD&T) as prescribed by the American Society of Mechanical Engineers (ASME) Y14.5M 2009 standard. It includes tolerance zone generation and interpretation using Maximum Material Condition (MMC), Least Material Condition (LMC) and Regardless of Feature Size (RFS) principles. Also covered are datum referencing and simulation, tolerances of form, orientation, runout, position and bonus tolerances. This course emphasizes the identification and use of datums and positional tolerances.

CADD 95 - Cooperative Work Experience Education

2-4 units

hours to be arranged

Enrollment Limitation: Employment or volunteer work in a position related to the student's major or career goal by the second week of the semester. Completion of or current enrollment in one course from the major.

Credit, degree applicable

Transfer CSU*

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Computer Aided Design/Drafting field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

Note: The total units earned for Cooperative Work Experience Education may not exceed 16 units.
(formerly Computer Aided Design/Drafting 95abcd)

CADD 99 - Independent Study

1-3 units

hours to be arranged

Enrollment Limitation: two courses in Computer Aided Design/Drafting with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work

Credit, degree applicable

Transfer CSU*

This course provides special advanced studies in a subject field of Computer Aided Design/Drafting not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Computer Aided Design/Drafting projects (54 hours per unit).

Note: *Transfer limitations apply. For eligibility requirements, go to www.elcamino.edu/admissions/credit.asp
(formerly Computer Aided Design/Drafting 99abc)

CIS 2 - Office Applications

3 units

2 hours lecture, 3 hours lab

Credit, degree applicable

Transfer CSU

In this course, students are introduced to the Windows operating system and the capabilities of the computer. The file management system, spreadsheets, presentation and database software, email management, and beginning through advanced word processing topics will be taught in a hands-on environment. Operation of the computer as a general purpose office tool will be emphasized. This course uses Microsoft Word, Access, Excel, PowerPoint, and Outlook.

CIS 11 - Help Desk Operations

3 units

2 hours lecture, 3 hours lab

Prerequisite: CIS 13 with a minimum grade of C or equivalent experience

Credit, degree applicable

Transfer CSU

This course focuses on current, recognized, best practices in the field of help desk and end-user support targeting the field of Information Technology. Topics include end-user support roles within an organization, strategies in dealing with end-users, technical support documentation, and problem identification/resolution. Course emphasis is placed on using software tools to understand and implement service desk processes such as user support process flow, incident management, needs analysis, troubleshooting, and support documentation.

Note: Letter grade or pass/no pass option.

CIS 13 - Computer Information Systems

3 units

3 hours lecture, 2 hours lab

Prerequisite: eligibility for ENGL 84

Recommended Preparation: MATH 23 or BUS 15

Credit, degree applicable

Transfer CSU, UC

This course introduces students to the concepts and technologies used in processing information in an organization. Topics include information systems, database management systems, networking, e-commerce, ethics and security, computer systems hardware, and applications. Students will apply these concepts and methods through hands-on projects developing computer-based solutions using application software.

CIS 16 - Application Development and Programming Using Visual Basic.Net

3 units

2 hours lecture, 3 hours lab

Prerequisite: CIS 13 with a minimum grade of C or equivalent experience

Credit, degree applicable

Transfer CSU, UC

This course is an introduction to the fundamental concepts and models of application development including program design, data structures, programming, problem solving, programming logic, and design techniques for event-driven programs. A step-by-step, hands-on, project experience is used with a modern application programming language and development platform.

CIS 18 - Systems Analysis and Design

3 units

2 hours lecture, 2 hours lab

Recommended Preparation: CIS 13 or equivalent experience

Credit, degree applicable

Transfer CSU

In this course, the student will study systems analysis and design concepts as they are applied in business environments. Topics emphasize methodologies used by the analyst throughout the systems development life cycle to analyze business problems or opportunities, address user needs, perform feasibility studies, specify business requirements through process, data and logic modeling, consideration of development alternatives, and implementation and maintenance of systems.

CIS 19 - Internet, Social Networking, and the Web

3 units

2 hours lecture, 3 hours lab

Prerequisite: CIS 13 with a minimum grade of C or equivalent experience

Credit, degree applicable

Transfer CSU

This course explores the current state of the internet, Social Networking, and the Web in correlation with emerging technologies. Topics discussed and examined through various assignments include internet fundamentals, web functionality, business uses of the web, social media, privacy and social networking.

CIS 26 - Using Microsoft Excel

3 units

2 hours lecture, 3 hours lab

Prerequisite: CIS 13 or equivalent experience

Credit, degree applicable

Transfer CSU

In this course, students learn to use spreadsheets to solve business and information system problems in a graduated series of laboratory projects. The database, graphics features, macros, and advanced logical and financial functions of spreadsheets are utilized. The student will create and enhance charts, work with multiple worksheets and integrate spreadsheets with other Windows applications.

CIS 28 - Database Management using Microsoft Access

3 units

2 hours lecture, 2 hours lab

Prerequisite: CIS 13 with a minimum grade of C or equivalent experience

Credit, degree applicable

Transfer CSU

This course offers instruction in the use of relational database management systems within a Windows environment. Students learn database concepts and terminology. Topics include designing, creating, and modifying table structures and relationships, and creating complex queries. Students create forms for viewing, entering, and editing data, and create reports that summarize and group information. Skills are applied to typical business operations such as inventory and human resources.

CIS 29 - Advanced Database Applications

3 units

2 hours lecture, 3 hours lab

Prerequisite: CIS 28 with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course offers advanced instruction in relational databases. Students will learn to design and develop a database from user specifications. Topics include analyzing source documents, normalizing a database, techniques of effective design, big data, data mining, and data analytics. Applications used are typical business operations such as inventory and human resources.

CIS 30 - Introduction to eCommerce

3 units

2 hours lecture, 3 hours lab

Recommended Preparation: CIS 13 or equivalent experience and ENGL 82

Credit, degree applicable

Transfer CSU

This introductory course will acquaint the student with fundamentals of Electronic Commerce. The primary focus will be the study of current eCommerce practices, business models, techniques and opportunities for conducting business via the internet. This course will help to prepare students for employment as web content managers, eCommerce market research analysts and eCommerce business managers.

Note: Letter grade or pass/no pass option.

CIS 40 - Personal Computer Support and Networking

3 units

2 hours lecture, 3 hours lab

Recommended Preparation: CIS 13 or equivalent experience

Credit, degree applicable

Transfer CSU, UC

In this course, students will become familiar with managing and supporting personal computers and basic networking within an organization. The class will emphasize networks and devices such as tablets, routers, office servers, personal computers, and systems software management. Topics will include network fundamentals, personal computer concepts, computer devices, hardware management, applications and operating system software installation, maintenance and troubleshooting, small network configuration, wireless LAN (Local Area Network), and ethical concerns within the information systems environment.

CIS 80 - Database Programming

4 units

3 hours lecture, 2 hours lab

Prerequisite: CIS 28 with a minimum grade of C or equivalent experience in database design

Credit, degree applicable

Transfer CSU

The effective and efficient use of the structured query programming language (SQL), used in Oracle, SQL Server, and many other database applications, is introduced and developed in lectures and reinforced through a series of lab projects of increasing complexity. Topics include the building and manipulation of tables, data retrieval, and data administration, as used in modern business.

CIS 84 - MySQL Database Programming for the Web

3 units

2 hours lecture, 3 hours lab

Recommended Preparation: Computer Information Systems 13 or Computer Information Systems 28 with a minimum grade of C or equivalent experience

Credit, degree applicable

Transfer CSU

This course is an introduction to the MySQL database, a popular open-source database choice used in modern web applications. Students will learn the MySQL interface and architecture, the fundamentals of relational databases, how to design and develop MySQL queries and reports, and how to build web applications which incorporate MySQL as the database layer. Topics include fundamental concepts such as data types, logical operators, working with multiple tables and joins, and how to create and manage a MySQL database, and integrate it into server-side programs which collect and present data. This course will incorporate a server-side programming language to demonstrate the use of a MySQL database for a business application.

CIS 95 - Cooperative Work Experience Education

2-4 units

hours to be arranged

Enrollment Limitation: Employment or volunteer work in a position related to the student's major or career goal by the second week of the semester. Completion of or current enrollment in one course from the major.

Credit, degree applicable

Transfer CSU*

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Computer Information Systems field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

Note: *Transfer limitations apply. The total units earned for Cooperative Work Experience Education may not exceed 16 units. (formerly Computer Information Systems 95/96abcd)

CIS 99 - Independent Study

1-3 units

hours to be arranged

Enrollment Limitation: two courses in Computer Information Systems with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work

Credit, degree applicable

Transfer CSU*

This course provides special advanced studies in the field of Computer Information Systems not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Computer Information Systems projects (54 hours per unit).

Note: For eligibility requirements, go to www.elcamino.edu/admissions/credit.asp (formerly Computer Information Systems 99abc)

CIS 119 - Introduction to Computer Security

3 units

2 hours lecture, 3 hours lab

Prerequisite: CIS 13 with a minimum grade of C or equivalent experience

Credit, degree applicable

Transfer CSU

This course introduces students to computer security in a networked environment, and methods to identify and prevent cybercrimes. Types of cybercrimes explored range from alteration of computer software to direct access attacks and data tampering. Topics include security for communication networks, infrastructure security, authentication types, malicious code, intrusion detection, cryptography, and biometrics. Vulnerabilities in cloud computing, mobile platforms, web services, and the Internet of Things is also covered.

CIS 120 - Computer Forensics

3 units

2 hours lecture, 3 hours lab

Prerequisite: CIS 13 with a minimum grade of C or equivalent experience

Recommended Preparation: Computer Information Systems 119

Credit, degree applicable

Transfer CSU

This course introduces students to computer forensics, focusing on evidence found in computers and digital media. Topics include the analysis of digital evidence, chain of custody, forensic tools, and recognizing compromised systems. Students will learn the proper techniques used to investigate a security breach as well as how to analyze and preserve evidence from computing devices in a manner suitable for presentation in a court of law.

CIS 121 - Cybersecurity Programming

3 units

2 hours lecture, 3 hours lab

Prerequisite: Computer Information Systems 13 with a minimum grade of C or equivalent experience

Recommended Preparation: Computer Information Systems 119

Credit, degree applicable

Transfer CSU

This course is an introduction to cybersecurity penetration testing using the Python programming language. The student will learn how to use Python scripting to execute effective and efficient penetration scripts focused on exposing vulnerabilities in computer systems. Topics include writing script for various types of cyber-attacks, including scanner, wireless, SQL injection, and parameter tampering.

CIS 122 - Ethical Hacking

3 units

2 hours lecture, 3 hours lab

Prerequisite: CIS 13 with a minimum grade of C or equivalent experience

Credit, degree applicable

Transfer CSU

This course introduces the principles and techniques associated with the cybersecurity practice known as penetration testing or ethical hacking. Topics covered will include planning, reconnaissance, scanning, exploitation, post-exploitation, and result reporting. Students will learn how system vulnerabilities are exploited and security problems can be avoided.

CIS 132 - Web Development using HTML5, CSS3, and Word Press

3 units

2 hours lecture, 3 hours lab

Credit, degree applicable

Transfer CSU

This course is an introduction to technologies used to create dynamic, expressive, and responsive websites, using HTML5 (Hypertext Markup Language 5), CSS3 (Cascading Style Sheets 3), and WordPress, a popular Content Management System. Students will learn how to structure documents logically and create information-rich sites using WordPress, incorporating new HTML5 features including typography, social tools, geolocation, drag-and-drop functionalities, and API's (Application Programming Interfaces). Students will also use CSS3 to control the style, appearance, and presentation of website content, using animation, transformation, transition, filter, and shadow techniques. Accessibility guidelines will also be covered for compliance with current ADA (Americans with Disabilities Act) standards.

CIS 133 - Mashup JavaScript, jQuery and AJAX

4 units

3 hours lecture, 3 hours lab

Prerequisite: CIS 13 with a minimum grade of C or equivalent experience

Credit, degree applicable

Transfer CSU

The fundamental concepts and structures of programming for the Web using client-side markup languages and the JavaScript programming language are covered. Students will develop web programs using conditional structures, variables, classes, objects, functions, events, arrays, windows, and forms. Standard documentation, testing and debugging techniques, used in the creation of eBusiness applications will be covered. Additional topics include an introduction to jQuery, XML and JSON data structures, and AJAX technologies used in web services.

Note: Letter grade or pass/no pass option.

CIS 134 - ASP.NET with C# Business Web Programming

4 units

3 hours lecture, 3 hours lab

Recommended Preparation: CIS 13 or CIS 133

Credit, degree applicable

Transfer CSU

This introductory programming course incorporates the basic concepts of web programming, problem solving, programming logic, and design techniques using the Microsoft.NET web programming languages. The student will be able to build a dynamic data-driven web application using an SQL (Structured Query Language) database. Emphasis is placed on emerging web programming skills and technologies to prepare students for advanced programming applications and to enter the e-Business industry.

Note: Letter grade or pass/no pass option.

CIS 136 - Building Mobile Apps

3 units

2 hours lecture, 3 hours lab

Prerequisite: CIS 13 with a minimum grade of C or equivalent experience

Credit, degree applicable

Transfer CSU

In this course, students will design, develop, test, debug and launch mobile applications (apps) using open source standards, that are adaptable to various development frameworks such as Android, iOS, and Windows. Topics include design principles, application structure, graphics, user interfaces, animation, and data storage. Cross-platform tools to bridge frameworks and access native features of the mobile device including geolocation, accelerometer, notifications, and services will be covered.

CIS 137 - Computer Networking Fundamentals

3 units

2 hours lecture, 3 hours lab

Recommended Preparation: CIS 13 or equivalent experience

Credit, degree applicable

Transfer CSU

This course introduces the architecture, structure, functions, components, and models of the internet and other computer networks. The principles and structure of IP (Internet Protocol) addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for further study of computer networks. The OSI (Open Systems Interconnection) and TCP (Transmission Control Protocol) layered models are used to examine the nature and roles of protocols and services at the application, network, data link, and physical layers. Students will learn to configure, troubleshoot and resolve problems within a network.

CIS 140 - Introduction to Networks Cisco 1

3 units

2 hours lecture, 2 hours lab

Prerequisite: CIS 13 with a minimum grade of C or equivalent experience

Recommended Preparation: CIS 40

Credit, degree applicable

Transfer CSU

This course introduces students to fundamental networking concepts and technologies. Students will learn the skills necessary to plan and implement small networks across a range of applications. The course uses concepts of both hardware and software in order to understand principles of communication theory. This class is technically oriented and will prepare students for industry certification.

Note: This course is semester one in the Cisco Networking Academy program (*Preparation for CCNA Certification.*)

CIS 141 - Routing and Switching Essentials Cisco 2

3 units

2 hours lecture, 2 hours lab

Prerequisite: CIS 140 with a minimum grade of C or equivalent experience

Credit, degree applicable

Transfer CSU

In this course, students will develop an understanding of how a router learns about remote networks and determines the best path to those networks. This course includes both static routing and dynamic routing protocols. Students will become familiar with the terminology and technology used to design and build local and wide area networks. The course will also focus on routing protocols and concepts.

Note: This course is semester two in the Cisco Networking Academy program. (*Preparation for the CCNA Certification.*)

CIS 142 - Scaling Networks Cisco 3

3 units

2 hours lecture, 2 hours lab

Prerequisite: CIS 141 with a minimum grade of C or equivalent experience

Credit, degree applicable

Transfer CSU

This course provides an understanding of how switches are interconnected and configured to provide network access to Local Area Network users. It also provides instruction on how to integrate wireless devices into Local Area Networks. This course is technically oriented and will prepare students for industry certification.

Note: This course is semester three in the Cisco Networking Academy program (*Preparation for the CCNA Certification.*)

CIS 143 - Connecting Networks Cisco 4

3 units

2 hours lecture, 2 hours lab

Prerequisite: CIS 142 with a minimum grade of C or equivalent experience

Credit, degree applicable

Transfer CSU

This course provides a fundamental understanding of WAN (Wide Area Network) networking concepts and a wide range of network technologies. Instruction will be given on several WAN technologies, including PPP (Point to Point), frame relay, and related topics, such as access control list, network address translation, and virtual private networks.

Note: This course is semester four in the Cisco Networking Academy program (*Preparation for CCNA Certification.*)

CIS 150 - Cloud Computing with AWS

3 units

2 hours lecture, 3 hours lab

Recommended Preparation: CIS 13 with a minimum grade of C or equivalent experience

Credit, degree applicable

Transfer CSU

This course introduces students to the fundamentals of cloud computing. Topics include different cloud computing models, including Infrastructure as a Service, Platform as a Service, and Software as a Service. Students will be using the Amazon Web Services (AWS) platform to examine the practice of various cloud services (including storage, servers, and software applications). The course will also survey the industry trends toward cloud computing, analyze the economics of cloud computing, discuss the various cloud careers and industry demand for cloud computing skills.

CIS 152 - Data Storage with AWS

3 units

2 hours lecture, 3 hours lab

Prerequisite: Computer Information Systems 150 with a minimum grade of C or equivalent experience

Credit, degree applicable

Transfer CSU

This course introduces students to Amazon Web Services (AWS) data storage systems. Topics of the course include the design and management of cloud-based database systems and the concept of cloud-based data storage services. Students will define, operate, and scale databases utilizing Structured Query Language (SQL) database services and unstructured NoSQL database services within the AWS cloud. This course will also cover the design and operation of AWS data storage technologies using block-based and object-based storage.

CIS 154 - Compute Engines with AWS

3 units

2 hours lecture, 3 hours lab

Prerequisite: Computer Information Systems 150 with a minimum grade of C or equivalent experience

Recommended Preparation: Computer Information Systems 152 OR Computer Information Systems 134 with a minimum grade of C or equivalent experience OR Computer Science 3 with a minimum grade of C or equivalent experience

Credit, degree applicable

Transfer CSU

This course introduces compute engine technologies with Amazon Web Services (AWS). Students will explore the following compute models: Infrastructure as a Service (IaaS), Platform as a Service (PaaS), and Function as a Service (FaaS), and microservices. In the course, students will use AWS to set up, configure and manage compute services to address load balancing and scaling requirements in the cloud. Students will also write code to create deployment scripts for the AWS infrastructure.

CIS 156 - Security with AWS

3 units

2 hours lecture, 3 hours lab

Prerequisite: Computer Information Systems 150 with a minimum grade of C or equivalent experience

Recommended Preparation: Computer Information Systems 152 AND Computer Information Systems 154

Credit, degree applicable

Transfer CSU

This course focuses on security as it applies to cloud technologies. Students will learn the general security concept of confidentiality, integrity, and availability of computing resources and will use Amazon Web Services to explore how security is implemented in a cloud infrastructure. Specific AWS topics include the AWS Shared Responsibility model and how to use AWS security and monitoring tools to analyze hardware, services, and networks. User activity, key management services, various firewalls, and the planning and configuration of private and public subnets will also be covered.

CSCI 1 - Problem Solving and Program Design Using C++

4 units

3 hours lecture, 3 hours lab

Prerequisite: MATH 170 with a minimum grade of C or equivalent skill

Credit, degree applicable

Transfer CSU, UC

This course is an introduction to problem solving and program design using structured, top-down, algorithmic development techniques applied to the solution of numeric and non-numeric problems. Software engineering topics such as analysis, design, implementation, testing, documentation, and maintenance of software are discussed. Laboratory work will be done using the C++ computer language. The course also summarizes the evolution of programming languages illustrating how this history has led to the paradigms available today.

Note: This course meets the CSU general education requirement for mathematics and quantitative reasoning.

CSCI 2 - Introduction to Data Structures

5 units

4 hours lecture, 3 hours lab

Prerequisite: CSCI 1 with a minimum grade of C

Recommended Preparation: MATH 190

Credit, degree applicable

Transfer CSU, UC

In this course, the C++ computer language is used to demonstrate methods of representing and manipulating data structures. The student will learn the object-oriented problem solving skills necessary to read, write, and correct complex computer programs, and to make important design decisions. Topics include lists, stacks, queues, trees, searching, sorting, modeling and algorithm analysis.

CSCI 3 - Computer Programming in Java

4 units

3 hours lecture, 3 hours lab

Prerequisite: CSCI 1 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC

This course includes a detailed coverage of the Java programming language including Java data types, operators and expressions, control structures, iterations, functions, arrays, classes and inheritance, files, graphical user interface (GUI) applications with event handling, and applets for world wide web applications.

CSCI 7 - The Beauty of Computer Science Principles

4 units

3 hours lecture, 3 hours lab

Prerequisite: Credit in MATH 37 or MATH 40 with a minimum grade of C in prerequisite or qualification by testing (El Camino College Mathematics Placement Test) and assessment

Credit, degree applicable

Transfer CSU, UC

This course introduces students to the central ideas of computer science, inviting students to develop the computational thinking vital for success in computer programming and across multiple disciplines. The course is unique in its focus on fostering students to be creative and encouraging students to apply innovative processes when developing computational artifacts such as a visualization, graphic or movie. Students will design and program inventive solutions to computational problems using an iterative process similar to what computer scientists, engineers, artists, and writers use to bring ideas to life.

CSCI 12 - Programming for Internet Applications using PHP, JavaScript, and XHTML

5 units

5 hours lecture, 5 hours lab

Prerequisite: CSCI 1 or CIS 16 or CIS 134 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

In this introductory internet programming course, students learn the fundamentals of internet programming with JavaScript and Hypertext Preprocessor (PHP), a widely used, open source, general-purpose server-side programming language. Students design and write applications that extend web servers. These applications use backend databases to process data submitted through web forms and provide access to dynamically generated webpages with the retrieved data from the database.

CSCI 14 - Computer Programming in Python for Computer Science

4 units

3 hours lecture, 3 hours lab

Prerequisite: MATH 170 with a minimum grade of C or qualification by testing (El Camino College Mathematics Placement Test) and assessment or equivalent skill

Credit, degree applicable

Transfer CSU

This course is an introduction to computer programming and algorithm design using Python programming language for computer science. The course covers the fundamentals of Python programming: basic data types, switching and looping constructs, functions, recursion, objects, arrays, and lists, and basic input and output, both interactive and with files.

CSCI 16 - Assembly Language Programming for x86 (IBM PC) Processors

4 units

3 hours lecture, 3 hours lab

Prerequisite: CSCI 1 or CSCI 3 or CIS 80 with a minimum grade of C in prerequisite or equivalent and MATH 180 with a minimum grade of C or concurrent enrollment

Credit, degree applicable

Transfer CSU, UC

This course includes detailed coverage of assembly language programming for x86 processors. Topics include hexadecimal arithmetic, two's complement arithmetic, memory organization, addressing modes, procedure calls, the stack frame, macros, calling assembly language procedures from C or C++, recursion, BIOS and DOS interrupts, the floating point unit and instructions, and the debugger.

(formerly Computer Science 15P)

CSCI 23 - Advanced Java Programming and the Android Operating System

4 units

3 hours lecture, 3 hours lab

Prerequisite: CSCI 3 with a minimum grade of C or equivalent skill

Credit, degree applicable

Transfer CSU

This course is an advanced Java programming language course that will include topics such as Graphical User Interface (GUI) development, multimedia, exception handling, network programming, multithreading, database manipulation, and Java servers and servlets. There will also be discussion about the Android operating system, including understanding the origins as well as how interaction is done with it. Students will complete a major Java programming project based on the topics taught in this course.

CSCI 30 - Advanced Programming in C++

4 units

3 hours lecture, 3 hours lab

Prerequisite: CSCI 2 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course presents an advanced coverage of the C++ programming language. Topics presented include templates, the Standard Template Library, data abstraction, operator overloading, inheritance, friend functions, virtual functions, multiple inheritance, and virtual base classes. An emphasis will be placed on object-oriented programming.

CSCI 40 - Introduction to UNIX and LINUX Operating Systems

4 units

3 hours lecture, 3 hours lab

Credit, degree applicable

Transfer CSU, UC

This course covers UNIX and LINUX operating system concepts and include basic commands, file structures, editors, file management utilities, shell programming, process control, and remote messaging as well as network and system administration.

Note: Letter grade or pass/no pass option.

CSCI 99 - Independent Study

1-3 units

hours to be arranged

Enrollment Limitation: completion of two courses in Computer Science with a minimum grade of B in each course and acknowledgment by the instructor with whom the student will work

Credit, degree applicable

Transfer CSU*

This course provides special advanced studies in a subject field of Computer Science not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Computer Science projects (54 hours per unit).

Note: *Transfer limitations apply. For eligibility requirements, go to www.elcamino.edu/admissions/credit.asp (formerly Computer Science 99abc)

CTEC 95 - Cooperative Work Experience Education

2-4 units

hours to be arranged

Enrollment Limitation: Employment or volunteer work in a position related to the student's major or career goal by the second week of the semester. Completion of or current enrollment in one course from the major.

Credit, degree applicable

Transfer CSU*

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Construction Technology field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

Note: *Transfer limitations apply. The total units earned for Cooperative Work Experience Education may not exceed 16 units. (formerly Construction Technology 95abcd)

CTEC 99 - Independent Study

1-3 units

hours to be arranged

Enrollment Limitation: two courses in Construction Technology with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work

Credit, degree applicable

Transfer CSU*

This course provides special advanced studies in a subject field of Construction Technology not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Construction Technology projects (54 hours per unit).

Note: *Transfer limitations apply. For eligibility requirements, go to www.elcamino.edu/admissions/credit.asp (formerly Construction Technology 99abc)

CTEC 100 - Building Fundamentals

4 units
2.5 hours lecture, 5 hours lab
Credit, degree applicable
Transfer CSU

This course is an introduction to the fundamentals of the building trades. Topics of instruction include: building codes, construction mathematics, rough framing, and technical information on materials and methods of residential construction. Practical instruction is given in the use of tools and materials through construction laboratory work.

CTEC 110 - Additions and Remodeling

4 units
2.5 hours lecture, 5 hours lab
Credit, degree applicable
Transfer CSU

This course is an introduction to the fundamentals of residential remodeling and additions. Instruction includes: planning and design, permit process, blueprint reading, and building codes. Practical instruction is given in the use of tools and materials through construction laboratory work.

CTEC 121 - Concrete and Formwork

4 units
2.5 hours lecture, 5 hours lab
Prerequisite: CTEC 100 or CTEC 110 with a minimum grade of C in prerequisite or equivalent
Credit, degree applicable
Transfer CSU

This is an advanced course in construction technology, covering concrete and formwork. Topics of instruction include the International Residential Code (IRC) requirements, construction mathematics, house layout, blueprint reading, formwork, use of leveling instruments and estimating. Practical instruction is given in the use of tools and materials through construction laboratory work.

CTEC 122 - Rough Framing

4 units
2.5 hours lecture, 5 hours lab
Prerequisite: CTEC 100 or CTEC 110 with a minimum grade of C in prerequisite or equivalent
Credit, degree applicable
Transfer CSU

This is an advanced course in construction technology, covering rough framing. Topics of instruction include materials and methods of residential rough frame construction, rough lumber estimating and International Residential Code (IRC) requirements. Practical instruction is given in the use of tools and materials through construction laboratory work.

CTEC 131 - Roof Framing

4 units
2.5 hours lecture, 5 hours lab
Prerequisite: CTEC 100 or CTEC 110 with a minimum grade of C in prerequisite or equivalent
Credit, degree applicable
Transfer CSU

This is an advanced course in construction technology, covering residential roof framing. Topics of instruction include roof structures, calculation and layout of various rafters, International Residential Code (IRC) requirements, roof construction and estimating. Practical instruction is given in the use of tools and materials through construction laboratory work.

CTEC 132 - Stair Framing

4 units
2.5 hours lecture, 5 hours lab
Prerequisite: CTEC 100 or CTEC 110 with a minimum grade of C in prerequisite or equivalent
Credit, degree applicable
Transfer CSU

This is an advanced course in construction technology, covering residential stair framing. Topics of instruction include stair design, calculations, layout and construction. Practical instruction is given in the use of tools and materials through construction laboratory work.

CTEC 141 - Interior Subcrafts

4 units

2.5 hours lecture, 5 hours lab

Prerequisite: CTEC 100 or CTEC 110 with a minimum grade of C in prerequisite or equivalent skills

Credit, degree applicable

Transfer CSU

This is an advanced course in construction technology, covering interior subcrafts. Topics of instruction include door hanging, drywall installation and finishing, ceramic tile setting, International Residential Code (IRC), and estimating. Practical instruction is provided in the use of tools and materials through construction laboratory work.

CTEC 142 - Exterior Subcrafts

4 units

2.5 hours lecture, 5 hours lab

Prerequisite: CTEC 100 or CTEC 110 with a minimum grade of C in prerequisite or equivalent skills

Credit, degree applicable

Transfer CSU

This is an advanced course in construction technology, covering exterior subcrafts. Topics of instruction include window installation, exterior lath, stucco application and texturing, siding, concrete blocks, International Residential Code (IRC), and estimating. Practical instruction is provided in the use of tools and materials through construction laboratory work.

CTEC 150 - Contract Estimating

3 units

3 hours lecture

Recommended Preparation: completion of 12 units of Construction Technology or a minimum of 3 years of construction work experience

Credit, degree applicable

Transfer CSU

This course is designed for those with construction backgrounds who desire to advance to a supervisory position or become contractors. Topics include: blueprint reading, International Building Code (IBC) requirements, quantity surveying and estimating, and basic financial statements.

CTEC 160 - Business and Legal Aspects of Contracting

3 units

3 hours lecture

Recommended Preparation: completion of 12 units of Construction Technology or a minimum of 3 years of construction work experience

Credit, degree applicable

Transfer CSU

This course is designed for those with construction backgrounds who desire to advance to a supervisory position or become contractors. Topics include: legal and business aspects of a contracting organization, Contractor's License Law, Lien Laws, labor code, payroll deductions, business organization and planning, and management principles.

CTEC 172 - Residential Electrical Wiring

4 units

2.5 hours lecture, 5 hours lab

Credit, degree applicable

Transfer CSU

This course focuses on residential electrical wiring in accordance with the National Electric Code (NEC). Topics include print reading, developing wiring diagrams, wiring, grounding and the placement of lights, switches, receptacles and fixtures. The proper selection and use of conduits, determination of branch circuit requirements, proper selection of circuit breakers, and the installation of service entrance and sub-panels are also covered. The techniques of electrical wiring are learned through construction laboratory work, which requires the use of standard electrical tools and materials.

CTEC 180 - Residential Plumbing

4 units

2.5 hours lecture, 5 hours lab

Credit, degree applicable

Transfer CSU

This course explores the layout and fabrication techniques needed to erect a water and waste plumbing system for a residence. Students apply appropriate methods and procedures by selecting proper size pipes, fittings, fixtures and accessories and install and test various fixtures and systems. Other topics include the diagnosing, troubleshooting and clearing of stoppages in a plumbing system.

CTEC 200 - General Cabinet Making

2 units
1 hour lecture, 3 hours lab
Credit, degree applicable
Transfer CSU

This course is one in a series of courses designed for students to develop a solid background in the fundamentals of woodworking technology. Topics include operating stationary woodworking equipment, handheld power tools and sanding equipment safely, lumber characteristics, gluing and clamping techniques, filing and chiseling, and fasteners. Students will fabricate free standing woodworking projects.

Note: Completion of the degree or certificate requirements qualifies students to receive a maximum of two years credit toward the California State Contractor's License for the C-6 Cabinet, Millwork and Finish Carpentry examination.

CTEC 201 - Upper Residential Cabinets

2 units
1 hour lecture, 3 hours lab
Credit, degree applicable
Transfer CSU

This course is one in a series of courses designed for students to develop a solid background in the fundamentals of woodworking technology. Topics include properties of wood and wood products, the fabrication and installation of upper residential cabinets, construction techniques and the multiple support systems used to attach wall or ceiling mounted cabinets.

Note: Completion of the degree or certificate requirements qualifies students to receive a maximum of two years credit toward the California State Contractor's License for the C-6 Cabinet, Millwork and Finish Carpentry examination.

CTEC 202 - Base Residential Cabinets

2 units
1 hour lecture, 3 hours lab
Credit, degree applicable
Transfer CSU

This course is one in a series of courses designed for students to develop a solid background in the fundamentals of woodworking technology. Topics include properties of wood and wood products, the fabrication and installation of base residential cabinets, correct construction techniques for load bearing cabinets, appropriate use of toe kicks, and use of sub tops for multiple types of counter top materials.

Note: Completion of the degree or certificate requirements qualifies students to receive a maximum of two years credit toward the California State Contractor's License for the C-6 Cabinet, Millwork and Finish Carpentry examination.

CTEC 203 - Dedicated Use Cabinets

2 units
1 hour lecture, 3 hours lab
Credit, degree applicable
Transfer CSU

This course is one in a series of courses designed for students to develop a solid background in the fundamentals of woodworking technology. Topics include properties of wood products, fabrication and installation of residential dedicated use cabinets, correct construction techniques for specialty cabinets such as built in oven, appliance garage, pantry, and wine storage.

Note: Completion of the degree or certificate requirements qualifies students to receive a maximum of two years credit toward the California State Contractor's License for the C-6 Cabinet, Millwork and Finish Carpentry examination.

CTEC 210 - Furniture Making Laboratory - Interpreting Commercial Plans

1.5 units
4.5 hours lab
Prerequisite: CTEC 200 or CTEC 201 or CTEC 202 or CTEC 203 with a minimum grade of C or concurrent enrollment
Credit, degree applicable
Transfer CSU

This course is one in a series of courses that will give students the opportunity to develop problem solving advanced skills in the design and fabrication of furniture with an emphasis on interpreting commercial plans. Topics include how to read and understand furniture construction plans, the meaning of symbols and calculations, reading dimensions, and verifying accuracy of stacked dimensions in relationship to the overall dimension.

Note: Completion of the degree or certificate requirements qualifies students to receive a maximum of two years credit toward the California State Contractor's License for the C-6 Cabinet, Millwork and Finish Carpentry examination.

CTEC 211 - Furniture Making Laboratory - Plan Modifications

1.5 units

4.5 hours lab

Prerequisite: CTEC 200 or CTEC 201 or CTEC 202 or CTEC 203 with a minimum grade of C or concurrent enrollment
Credit, degree applicable
Transfer CSU

This course is one in a series of courses that will give students the opportunity to develop advanced problem solving skills in the design and fabrication of furniture with an emphasis on plan modification. Topics include how to modify an existing plan, using golden mean for proper proportion, ergonomics, joinery and construction techniques to achieve a finished piece to the student's specific needs.

Note: Completion of the degree or certificate requirements qualifies students to receive a maximum of two years credit toward the California State Contractor's License for the C-6 Cabinet, Millwork and Finish Carpentry examination.

CTEC 212 - Furniture Making Laboratory - Developing Original Plans

1.5 units

4.5 hours lab

Prerequisite: CTEC 200 or CTEC 201 or CTEC 202 or CTEC 203 with a minimum grade of C or concurrent enrollment
Credit, degree applicable
Transfer CSU

This course is one in a series of courses that will give students the opportunity to develop problem solving advanced skills in the design and fabrication of furniture with an emphasis on developing original detailed plans. Topics include creating, drawing, and constructing furniture design, Bill of Material (BOM), plan of procedure and wood and fastener selection.

Note: Completion of the degree or certificate requirements qualifies students to receive a maximum of two years credit toward the California State Contractor's License for the C-6 Cabinet, Millwork and Finish Carpentry examination.

CTEC 213 - Furniture Making Laboratory - Building without Plans

1.5 units

4.5 hours lab

Prerequisite: CTEC 200 or CTEC 201 or CTEC 202 or CTEC 203 with a minimum grade of C or concurrent enrollment
Credit, degree applicable
Transfer CSU

This course is one in a series of courses structured as a problem-solving approach to furniture making with an emphasis on building without plans. Abandoning formal detailed plans, students will use thumbnail sketching techniques to create a furniture design. Thumbnail sketches will be used to create a full size drawing detailing joinery and using coloring techniques to emphasize wood contrasts. Taking measurements directly from full size drawings and referencing joinery details, students will fabricate a furniture piece.

Note: Completion of the degree or certificate requirements qualifies students to receive a maximum of two years credit toward the California State Contractor's License for the C-6 Cabinet, Millwork and Finish Carpentry examination.

CTEC 220 - Hinging Systems and Doors

2.5 units

1.5 hours lecture, 3 hours lab

Prerequisite: CTEC 200 or CTEC 201 or CTEC 202 or CTEC 203 with a minimum grade of C or concurrent enrollment
Credit, degree applicable
Transfer CSU

This course is the study of principles and operation of hinge mortising and insertion machine (eco-press). Topics include working with hinges, hinging plates, appropriate door construction and installation.

Note: Completion of the degree or certificate requirements qualifies students to receive a maximum of two years credit toward the California State Contractor's License for the C-6 Cabinet, Millwork and Finish Carpentry examination.

CTEC 221 - Drawer Systems

2.5 units

1.5 hours lecture, 3 hours lab

Prerequisite: CTEC 200 or CTEC 201 or CTEC 202 or CTEC 203 with a minimum grade of C or concurrent enrollment
Credit, degree applicable
Transfer CSU

This course is the study of dimensioning and drawer fabrication, use and installation of slide systems, and commercial jigs and installation tools.

Note: Completion of the degree or certificate requirements qualifies students to receive a maximum of two years credit toward the California State Contractor's License for the C-6 Cabinet, Millwork and Finish Carpentry examination.

CTEC 222 - Convenience Hardware

2.5 units

1.5 hours lecture, 3 hours lab

Prerequisite: CTEC 200 or CTEC 201 or CTEC 202 or CTEC 203 with a minimum grade of C

Credit, degree applicable

Transfer CSU

In this course, students learn the selection, use and installation of convenience hardware such as recycling bins, lazy susans, hampers and closet organizers. Topics include correct dimensioning and proper installation techniques unique to selected hardware.

CTEC 230 - Cabinet Making Lab

1.5 units

4.5 hours lab

Prerequisite: CTEC 200 or CTEC 201 or CTEC 202 or CTEC 203 with a minimum grade of C or concurrent enrollment

Credit, degree applicable

Transfer CSU

This course provides students the lab time and facility to take on more challenging projects in order to maintain and continue perfecting skills acquired in other construction technology courses. Students will focus on advanced cabinet fabrication techniques including machine joinery and use of jigs and fixtures. A work plan will be developed for efficient assembly, as well as incorporating final detail work and application of finishing materials.

CTEC 231 - Intermediate Cabinet Making Lab

1.5 units

4.5 hours lab

Prerequisite: CTEC 200 or CTEC 201 or CTEC 202 or CTEC 203 with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course is one in a series of courses designed to provide students the lab time and facility to take on more challenging projects in order to maintain and continue perfecting skills acquired in other Construction Technology courses. Students will focus on cabinet fabrication techniques incorporating custom design for specific applications, including sanding and routing techniques. A plan and procedure for proper sequence of sanding and routing will be developed to ensure professional results.

CH 1 - Personal and Community Health Issues

3 units

3 hours lecture

Recommended Preparation: ENGL 84 and ENGL B

Credit, degree applicable

Transfer CSU, UC*

This course is designed to provide a critical analysis of factors, which affect personal and community health. Primary emphasis is placed upon self-empowerment and disease prevention in a culturally diverse community. General topics include infectious and non-infectious diseases; physical fitness, weight management, and nutrition; human reproduction and sexuality; stress management and mental health; drug use and abuse; and environmental health.

Note: This course satisfies Section A, Area 5 of the associate degrees' requirements. The maximum UC credit allowed for students completing Contemporary Health 1 and CH 5 is one course.

CH 3 - Drugs and Alcohol in Society

2 units

2 hours lecture

Recommended Preparation: ENGL A and ENGL 84

Credit, degree applicable

Transfer CSU

This course provides students with an in-depth study of substance abuse and chemical dependency in our society. The course focuses on the analysis of root causes of substance abuse and identification of abused drugs. Short and long-term effects of drug abuse, assessment of educational and treatment options, as well as the psychosocial role of the family, will be examined.

CH 5 - Contemporary Women's Health

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC*

This course is designed to investigate the many sociological, psychological, and physiological aspects related to women's health. Topics include the life challenges women face, such as body image, abuse, nutrition and exercise, sexual and reproductive health, consumerism, and mental health.

Note: The maximum UC credit allowed for students completing Contemporary Health 5 and CH 1 is one course.

COSM 1 - Introduction to Cosmetology Procedures

13 units

6 hours lecture, 30 hours lab

Credit, degree applicable

Transfer CSU

This course covers the study of basic principles and practical operations of cosmetology equipment, procedures and techniques. It is designed as an intensive, multi-disciplinary lab in the most common cosmetology processes. Lectures cover the fundamental theories of the practice of cosmetology and their application. Laboratory work is designed to provide the basic cosmetology student with an intensive forum for development of basic cosmetology skills, techniques, safety practices, and sanitation procedures.

Note: COSM 10 and COSM 11 can be substituted for Cosmetology 1. First time students must purchase the complete kit of supplies from the El Camino College Bookstore.

COSM 2A - Intermediate Cosmetology

8 units

3 hours lecture, 15 hours lab

Prerequisite: COSM 1 or COSM 10 and COSM 11 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

The intermediate principles and practical operations of cosmetology equipment, procedures and techniques will be studied. The course is designed as an intensive, multidisciplinary workshop in the most common cosmetology processes. Lectures focus on intermediate theories of the practice of cosmetology and application. The lab supports cosmetology students with skills, techniques, safety practices, and sanitation procedures according to the California State Board of Barbering and Cosmetology. Students will be introduced to performing intermediate cosmetology procedures on clients in a salon setting.

COSM 2B - Advanced Cosmetology

8 units

3 hours lecture, 15 hours lab

Prerequisite: COSM 2A or COSM 11 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

The advanced principles and practical operations of cosmetology equipment, procedures and techniques will be studied. The course is designed as an intensive, multidisciplinary workshop in the most common cosmetology processes. Lectures focus on advanced theories of the practice of cosmetology and application. The lab is designed to support cosmetology students with skills, techniques, safety practices, and sanitation procedures according to the California State Board of Barbering and Cosmetology. Students will perform advanced cosmetology procedures on clients in a salon setting.

COSM 2C - Advanced Cosmetology and Introduction to State Board Review

8 units

3 hours lecture, 15 hours lab

Prerequisite: COSM 2B or COSM 11 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

This course is an advanced study of cosmetology practices. Lectures focus on advanced cosmetology theories. Emphasis is placed on mastery of the necessary cosmetology concepts, principles and skills on clients in a salon setting to pass the California State Licensing exam for Cosmetology. Students will also receive an introduction to prepare for the California State Board of Barbering and Cosmetology written and practical exams. Simulated state board exams will be administered.

COSM 2D - Advanced Preparation for State Board Review

8 units

3 hours lecture, 15 hours lab

Prerequisite: COSM 2C with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course is designed to prepare students for the California State Board of Barbering and Cosmetology licensing exams, both the written and practical. Students will complete the remaining 1600 hours of applied skill practices. Simulated state board exams will be administered.

Note: Prior to enrolling into this course, students must have completed 1300 of the 1600 hours of applied skill practices required by the State Board of Barbering and Cosmetology

COSM 3 - Advanced Cosmetology Applications

5 units

4 hours lecture, 28 hours lab (8 week course)

Prerequisite: COSM 1 or COSM 10 and COSM 11 with a minimum grade of C or completion of 399 hours from a state-approved cosmetology program

Credit, degree applicable

This course explores the study of advanced principles and practical operations of cosmetology equipment, procedures and techniques. It is designed as an intensive, multi-disciplinary class which focuses on the most common cosmetology processes. Lectures center on the advanced theories of the practice of cosmetology and application. Laboratory work is designed to support the advanced cosmetology student with an intensive forum for development of advanced cosmetology skills, techniques, safety practices and sanitation procedures.

COSM 4 - Cosmetology Practicum

4 units

2 hours lecture, 10 hours lab

Prerequisite: COSM 1 or COSM 10 and COSM 11 with a minimum grade of C in prerequisite

Credit, degree applicable

This course is designed for the student who is in need of receiving hours toward their State Board of Cosmetology requirement. The focus of this class is on the advanced principles and practical operations of cosmetology equipment, procedures and techniques.

Note: This course is repeatable.

COSM 6 - Cosmetology Client Lab

2 units

0 hours lecture, 6 hours lab

Prerequisite: COSM 2B with a minimum grade of C

Credit, degree applicable

In a salon setting, students will work on clients. This lab course is designed for students to receive the necessary hours of applied skill practices toward their State Board of Cosmetology requirement.

COSM 10 - Introduction to Cosmetology I

6.5 units

4 hours lecture, 14 hours lab

Credit, degree applicable

Transfer CSU

This course is the first of a two-course introductory series covering cosmetology procedures and equipment for wet and thermal styling, permanent waving, chemical straightening, hair coloring, scalp treatments, manicuring and pedicuring procedures. This is a preparatory course for the State Board of Cosmetology examination and employment.

Note: Students who have earned credit in COSM 1 cannot receive unit credit for Cosmetology 10.

First time students must purchase the complete kit of supplies from the El Camino College Bookstore.

COSM 11 - Introduction to Cosmetology II

6.5 units

4 hours lecture, 14 hours lab

Prerequisite: COSM 10 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

This is the second of a two-course introductory series covering cosmetology procedures for wet and thermal styling, permanent waving, chemical straightening, hair coloring, scalp treatments, facials, manicuring and pedicuring. This course is one of a sequence of courses that prepares students for the State Board of Cosmetology examination and employment.

Note: Students who have earned credit in COSM 1 cannot receive unit credit for Cosmetology 11.

COSM 16 - Cosmetology Applications

3 units

1.5 hours lecture, 7.5 hours lab

Prerequisite: COSM 1 or COSM 10 and COSM 11 with a minimum grade of C in prerequisite or equivalent

Credit, degree applicable

Transfer CSU

This course covers the study of intermediate principles, procedures, techniques, and practical operations of cosmetology equipment. It is designed as an intensive, multidisciplinary workshop in the most common cosmetology processes. Lectures center on the theories of the practice of cosmetology and their applications. Laboratory work is designed to provide the student with a forum for development of intermediate cosmetology skills, techniques, safety practices and sanitation procedures.

COSM 20 - Introduction to Esthetician

10 units

5 hours lecture, 15 hours lab

Credit, degree applicable

Transfer CSU

This course is an introduction to the principles of esthetician procedures. Students are introduced to the theory and practices of esthetician applications for facial, health, client protection and safety, hair removal and makeup applications. The lab is designed to support the esthetician student with extensive opportunities for the development of esthetician skills, techniques, safety and sanitation practices according to the California State Board of Barbering and Cosmetology.

Note: Upon completion of the esthetician program, students are expected to have a minimum of 600 hours of applied skill practice required by the State Board of Barbering and Cosmetology. Students will complete a minimum of 300 hours of esthetician training in this course.

COSM 21 - Advanced Esthetician

10 units

5 hours lecture, 15 hours lab

Prerequisite: COSM 20 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

This is an advanced course in the principles of esthetician procedures. Students are given advanced theory and practical practices in facials, preparation, health, safety, laws, regulations, disinfectant, sanitation, anatomy, physiology, hair removal, and makeup. State Board of Barbering and Cosmetology exam practices will be emphasized.

Note: When enrolling into this course students must have a minimum of 300 hours completed. Upon completion of this course, students are expected to have a minimum of 600 hours of applied skill practice required by the State Board of Barbering and Cosmetology.

COSM 95 - Cooperative Work Experience Education

2-4 units

hours to be arranged

Enrollment Limitation: Employment or volunteer work in a position related to the student's major or career goal by the second week of the semester. Completion of or current enrollment in one course from the major.

Credit, degree applicable

Transfer CSU*

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Cosmetology field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

Note: *Transfer limitations apply. The total units earned for Cooperative Work Experience Education may not exceed 16 units. (formerly Cosmetology 95abcd)

COSM 99 - Independent Study in Cosmetology

1-3 units

hours to be arranged

Enrollment Limitation: two courses in Cosmetology with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work

Credit, degree applicable

Transfer CSU*

This course provides special advanced studies in a subject field of Cosmetology not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Cosmetology projects (54 hours per unit).

Note: *Transfer limitations apply. For eligibility requirements, go to www.elcamino.edu/admissions/credit.asp (formerly Cosmetology 99abc)

DANC 99 - Independent Study

1-3 units

hours to be arranged

Enrollment Limitation: two courses in Dance with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work

Credit, degree applicable

Transfer CSU*

This course provides special advanced studies in a subject field of Dance not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Dance projects (54 hours per unit).

Note: *Transfer limitations apply. For eligibility requirements, go to www.elcamino.edu/admissions/credit.asp (formerly Dance 99abc)

DANC 101 - Dance Appreciation

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course is a survey of styles, artists, and cultural/historical context for dance as an art form and social expression. Topics of emphasis may be varied from semester to semester to reflect visiting artists, current events and popular culture. In addition to class time, students will be required to attend selected dance events.

(formerly Dance 1)

DANC 103 - History of Dance in the 20th Century

3 units

3 hours lecture

Recommended Preparation: DANC 110 or equivalent and eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course presents dance history of the 20th century. The course will focus on trends in ballet and modern dance forms as they relate to 20th century aesthetic viewpoints. Attendance at selected dance events is required.

(formerly Dance 3)

DANC 105 - Music for Dance

2 units

1 hour lecture, 3 hours lab

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course explores the relationships between music and dance through an introduction to the elements of music and to historical developments in style and formal structures of music for dance. Emphasis will be placed on the analysis of rhythms for dance accompaniments.

(formerly Dance 5)

DANC 110 - Beginning Dance

2 units
1 hour lecture, 3 hours lab
Credit, degree applicable
Transfer CSU, UC

This course is an introduction to basic dance techniques and terminology. It includes segments on body alignment, flexibility, strength, coordination and combinations common to ballet, jazz and modern dance. Attendance is required at selected dance events.

Note: Letter grade or pass/no pass option.
(formerly Dance 19ab)

DANC 120A - Beginning Ballet A

2 units
1 hour lecture, 3 hours lab
Recommended Preparation: DANC 110
Credit, degree applicable
Transfer CSU, UC

This course is the first in a sequence of two levels of ballet. This course will reinforce basic barre and center work ballet skills and is required of all dance majors. Attendance is required at selected dance events.

Note: Letter grade or pass/no pass option.
(formerly Dance 32ab)

DANC 120B - Beginning Ballet B

2 units
1 hour lecture, 3 hours lab
Prerequisite: DANC 120A with a minimum grade of C
Credit, degree applicable
Transfer CSU, UC

This course is the second of two levels of Ballet Technique I and is applicable to the dance major. Barre and center work will expand upon skills learned in the first ballet technique course. Emphasis will be on simple allegro and adagio combinations. Attendance at selected dance events is required.

Note: Letter grade or pass/no pass option.

DANC 130A - Beginning Modern Dance A

2 units
1 hour lecture, 3 hours lab
Recommended Preparation: DANC 110 or equivalent and ENGL A
Credit, degree applicable
Transfer CSU, UC

This course is the first in a sequence of four levels of modern dance. It focuses on the development of dance skills through modern dance movement, emphasizing combinations on the floor and standing or traveling through space. Creative expression is included through exploration of dance skills. Attendance is required at selected dance events.

Note: Letter grade or pass/no pass option.
(formerly Dance 42ab)

DANC 130B - Beginning Modern Dance B

2 units
1 hour lecture, 3 hours lab
Prerequisite: DANC 130A
Credit, degree applicable
Transfer CSU, UC

This course is the second in a sequence of four levels of modern dance. This class focuses on the continued development of dance skills through modern dance movement, emphasizing combinations on the floor and standing or traveling through space. Technique skills are reinforced through creative expression of more complex movement. Attendance is required at dance events sponsored by the Center for the Arts.

Note: This course is required of all dance majors. Letter grade or pass/no pass option.

DANC 140 - Jazz Dance I

2 units

1 hour lecture, 3 hours lab

Recommended Preparation: DANC 110 or equivalent

Credit, degree applicable

Transfer CSU, UC

This course is the first in a sequence of two levels of jazz dance. This course includes work on centering, turns, timing, flexibility, and strength training. Attendance is required at selected dance events.

Note: Letter grade or pass/no pass option.

(formerly Dance 22ab)

DANC 161 - Tap Dance I - Beginning

1 unit

3 hours lab

Credit, degree applicable

Transfer CSU, UC

This course introduces elementary techniques of tap dancing, including music theory concepts as they apply to the rhythms of tap dance. Attendance is required at selected dance events.

(formerly Dance 61ab)

DANC 162 - Hip Hop Dance

2 units

1 hour lecture, 3 hours lab

Credit, degree applicable

Transfer CSU, UC

In this course, students are introduced to various forms of Hip Hop dance. The history, vocabulary, social, and theatrical codifications of Hip Hop dance are also explored.

Note: Letter grade or pass/no pass option.

(formerly Dance 26abcd)

DANC 164 - World Dance

1 unit

3 hours lab

Credit, degree applicable

Transfer CSU, UC

This course provides an overview of several specific cultural dance styles which may include African, Afro-Cuban, Mexican, Tap, Middle Eastern, or Asian dance. The study of music, art, costumes, and regional customs of the particular style is also included.

(formerly Dance 12abcd)

DANC 165 - African Dance

1 unit

3 hours lab

Credit, degree applicable

Transfer CSU, UC

This course introduces selected dances of Africa through the practice of steps and choreography. The music and artifacts of the dances are covered, as well as their social or religious significance in African cultures. The coordination of polyrhythmic body movements with the music is emphasized. Attendance at selected dance events is required.

Note: Letter grade or pass/no pass option.

(formerly Dance 16ab)

DANC 167 - Social and Ballroom Dance

1 unit
3 hours lab
Credit, degree applicable
Transfer CSU, UC

This course includes instruction and practice of social and ballroom dances. Basic skills on leading and following, carriage and alignment of the body, animation, and etiquette are emphasized. Attendance at selected dance events is required.

(formerly Dance 10)

DANC 168 - Latin Social Dance

2 units
1 hour lecture, 3 hours lab
Credit, degree applicable
Transfer CSU, UC

This course is an overview of Latin social dances including salsa, cha cha, tango, rumba, samba, mambo, and selected folk and regional dances. Areas of study include movement theory, dance vocabulary, dance courtesy, fundamentals of music as they relate to dance, and dance history. Students will be exposed to vintage dance forms as well as current trends. Attendance at selected dance events is required.

Note: Letter grade or pass/no pass option.
(formerly Dance 51ab)

DANC 170 - Improvisation

2 units
1 hour lecture, 3 hours lab
Credit, degree applicable
Transfer CSU, UC

This course is designed for students with all levels of dance experience. The emphasis of the class is to encourage creative development rather than technical dance skills. It is highly recommended for non-dancers and beginning choreographers. Content areas include improvisational problems organized into three main areas: space, time, and movement invention. Topics progress from individual exploration to formally structured group improvisation. Attendance at selected dance events is required.

Note: Letter grade or pass/no pass option.
(formerly Dance 70abcd)

DANC 171A - Beginning Choreography A

2 units
1 hour lecture, 3 hours lab
Prerequisite: DANC 170 with a minimum grade of C or concurrent enrollment
Credit, degree applicable
Transfer CSU, UC

This course is an introduction to fundamental skills and concepts of choreography with an emphasis on utilizing movement for solo and duets in creating dances. Attendance at selected dance events is required.

(formerly Dance 171)

DANC 171B - Beginning Choreography B

2 units
1 hour lecture, 3 hours lab
Prerequisite: DANC 171A with a minimum grade of C
Credit, degree applicable
Transfer CSU, UC

This course is a continuation of DANC 171A with exploration of movement extended to small group choreography. Emphasis is on the development from solo and duet work to trio and quartets. Attendance at selected dance events is required.

DANC 183ab - Dance Workshop Ensemble

1 unit

4 hours lab per week to be arranged

Prerequisite: select one of the following courses: DANC 105, DANC 110, DANC 120A, DANC 120B, DANC 130A, DANC 130B, DANC 140, DANC 161, DANC 162, DANC 164, DANC 165, DANC 167, DANC 168, DANC 170, DANC 171A, DANC 171B, DANC 220A, DANC 220B, DANC 221, DANC 230A, DANC 230B, DANC 240, DANC 250, DANC 261, DANC 262, DANC 265, DANC 268, DANC 271A, DANC 271B with a minimum grade of C in prerequisite

Credit, degree applicable

Transfer CSU, UC

This course is an introduction to dance performance of works in progress. Students will participate in one or more formal or informal performances as dancers.

(formerly Dance 183abcd)

DANC 220A - Intermediate Ballet A

2 units

1 hour lecture, 3 hours lab

Prerequisite: DANC 120B with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC

This course is the second of two levels of ballet offered and is applicable to the dance major. Barre and center work will expand upon skills learned in Ballet I. Emphasis will be on complexity in allegro and adagio combinations. Students will perform variations from the classical repertoire. Attendance is required at selected dance events.

Note: Letter grade or pass/no pass option.

(formerly Dance 33abcd)

DANC 220B - Intermediate Ballet B

2 units

1 hour lecture, 3 hours lab

Prerequisite: DANC 220A with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course is the last in a series of four ballet courses and is applicable to the dance major. Barre and center work will expand upon skills learned in DANC 220A. Emphasis will be on complexity in allegro and adagio combinations. Students will perform variations from the classical repertoire. Attendance is required at selected dance events.

Note: Letter grade or pass/no pass option.

DANC 221 - Ballet Variations

2 units

1 hour lecture, 3 hours lab

Prerequisite: DANC 220B with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course continues the development of technical skills for ballet dance and emphasizes artistic expression through exposure to classical and contemporary ballet variations including partnering and dancing en Pointe. Attendance at selected dance events is required.

Note: Letter grade or pass/no pass option.

(formerly Dance 35abcd)

DANC 230A - Intermediate Modern Dance A

2 units

1 hour lecture, 3 hours lab

Prerequisite: DANC 130B with a minimum grade of C or equivalent

Recommended Preparation: ENGL A

Credit, degree applicable

Transfer CSU, UC

This modern dance course is the third in a series of four levels. This is an intermediate/advanced level class that further develops the student's ability to use the body as an instrument of expression, with emphasis on performance skills, technique related to specific modern dance styles, and dance as a concert art form. Attendance at selected dance events is required.

Note: Letter grade or pass/no pass option.
(formerly Dance 43abcd)

DANC 230B - Intermediate Modern Dance B

2 units

1 hour lecture, 3 hours lab

Prerequisite: DANC 230A with a minimum grade of C

Recommended Preparation: ENGL A

Credit, degree applicable

Transfer CSU, UC

This course is the fourth in a sequence of four levels of modern dance. This class further develops the student's ability to use the body as an instrument of expression, with emphasis on advanced performance skills, technique related to specific modern dance styles, and dance as a concert art form. Attendance at selected dance events at El Camino College sponsored by the Center of the Arts is required.

DANC 240 - Jazz Dance II

2 units

1 hour lecture, 3 hours lab

Prerequisite: DANC 140 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC

This course is a continuation of Jazz Dance I with increased emphasis on ease of performance, projection, speed of learning and development of individual style. It will concentrate on dance terminology and techniques required for success in professional auditions. This course is highly recommended for those seeking a career in dance performance or related theatrical fields. Attendance is required at selected dance events.

Note: Letter grade or pass/no pass option.
(formerly Dance 23abcd)

DANC 250 - Pilates Mat Class

3 units

2 hour lecture, 3 hours lab

Credit, degree applicable

Transfer CSU, UC

This course covers the concepts and exercises developed by Joseph H. Pilates. Emphasis is placed on mat work that features exercises for improving body alignment, strength, flexibility, muscle control, coordination, and breathing. Exercises are designed to enhance dance technique and performance as well as to help the dancer prevent injuries.

Note: Letter grade or pass/no pass option.
(formerly Dance 21abcd)

DANC 261 - Tap Dance II - Intermediate

2 units

1 hour lecture, 3 hours lab

Prerequisite: DANC 161 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC

In this course, students continue studying Tap Dance. Students will refine basic tap dance skills and learn more complex tap combinations that incorporate a variety of rhythms and styles. Attendance at selected dance events is required.

(formerly Dance 62abcd)

DANC 262 - Commercial Dance

2 units

1 hour lecture, 3 hours lab

Prerequisite: DANC 240 with a minimum grade of C

Recommended Preparation: DANC 120A

Credit, degree applicable

Transfer CSU, UC

This course is designed for those attending commercial auditions on a regular basis and emphasizes movement for commercial dance work used in motion pictures, concert dance, television, industrial shows, and other commercial applications. It offers instruction in current trends in popular dance, jazz styling, and commercial audition preparation. Attendance is required at selected dance events.

Note: Letter grade or pass/no pass option.

(formerly Dance 25abcd)

DANC 265 - Intermediate African Dance

2 units

1 hour lecture, 3 hours lab

Prerequisite: DANC 165 with a minimum grade of C

Recommended Preparation: DANC 130A or DANC 140

Credit, degree applicable

Transfer CSU, UC

As a continuation of African Dance, this course will introduce new movement patterns focusing on technical skills and traditional dances that are found in African dance. The class will also explore Dunham Technique as a means for providing a basic foundation in African dance, focusing on torso movements, isolations, and feet movements. Attendance is required at selected dance events.

Note: Letter grade or pass/no pass option.

(formerly Dance 17abcd)

DANC 268 - Intermediate Latin Social Dance

2 units

1 hour lecture, 3 hours lab

Prerequisite: DANC 168 with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course builds on the basic vocabulary and steps of the Latin social dances including salsa, cha cha, tango, rumba, samba, mambo, and selected folk and regional dances. Areas of study include movement theory, dance vocabulary, dance courtesy, and musical rhythms as they relate to dance and dance history. Students will be exposed to vintage dance forms as well as current trends. Attendance is required at selected events.

Note: Letter grade or pass/no pass option.

(formerly Dance 52abcd)

DANC 271A - Intermediate Choreography A

2 units

1 hour lecture, 3 hours lab

Prerequisite: DANC 171B with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC

In this course, students further develop choreographic concepts and skills from DANC 171B. Methods of expanding initial movement concepts from small group to large group composition are also emphasized. Attendance at selected dance events is required.

(formerly Dance 271)

DANC 271B - Intermediate Choreography B

2 units

1 hour lecture, 3 hours lab

Prerequisite: DANC 271A with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

In this course, students will further develop choreographic concepts and skills learned in DANC 271A. Methods for expanding concepts from small groups to larger group compositions will be explored while using solo and duet composition within large ensembles. This is an advanced level of choreographic development that incorporates and synthesizes all beginning and intermediate skill levels learned. Attendance at selected dance events is required.

DANC 287ab - Concert Dance Ensemble

1 unit

4 hours lab per week to be arranged

Enrollment Limitation: audition

Recommended Preparation: Intermediate/advanced level of technique in ballet, modern, and jazz

Credit, degree applicable

Transfer CSU, UC

This course offers students an opportunity to participate in a concert dance production in a capacity to be determined by the abilities of the individual and the demands of the choreography.

(formerly Dance 287abcd)

DANC 289ab - Advanced Dance Theatre

1 unit

4 hours lab per week to be arranged

Enrollment Limitation: audition

Recommended Preparation: DANC 183ab

Credit, degree applicable

Transfer CSU, UC

In this course, students organize production elements and rehearse as performing members of a dance company. Dance performance techniques and artistic skills are emphasized. Choreography is by faculty, guest artists, or advanced level dance students. Emphasis is also given to preparation for pre-professional auditions.

(formerly Dance 289abcd)

ECON 1 - Principles of Economics: Macroeconomics

3 units

3 hours lecture

Prerequisite: MATH 73 or MATH 80 with a minimum grade of C in prerequisite or qualification by testing (El Camino College Mathematics Placement Test) and assessment

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course introduces students to the principles that explain the operation of the national economy. Topics to be analyzed include consumption of products, exchange, aggregate output, the money supply, national income, price level, economic growth, international trade, international finance, and macroeconomic policies.

Note: Economics or Business majors should consult with a counselor to determine which intermediate algebra course is appropriate for the major.

ECON 1H - Honors Principles of Economics: Macroeconomics

3 units

3 hours lecture

Prerequisite: MATH 73 or MATH 80 with a minimum grade of C in prerequisite or qualification by testing (El Camino College Mathematics Placement Test) and assessment

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This honors course, intended for students in the Honors Transfer Program, introduces students to the principles that explain the operation of the national economy. Topics to be analyzed include consumption of products, exchange, aggregate output, the money supply, national income, price level, economic growth, international trade, international finance, and macroeconomics policies. This course is enriched through extensive, rigorous reading, writing, and research assignments.

Note: Students may take either ECON 1 or Economics 1H. Duplicate credit will not be awarded.

ECON 2 - Principles of Economics: Microeconomics Theory

3 units

3 hours lecture

Prerequisite: ECON 1 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course focuses on the fundamental laws of supply and demand. The principles that govern the operation of the market economy using microeconomic theory will be examined. In particular, emphasis will be placed on decision making by individual consumers and firms, and how the allocation of goods and resources are determined in both competitive and monopolistic markets.

ECON 5 - Fundamentals of Economics

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC*

In this course, students are introduced to the study of how a market economy solves the problem that the scarcity of resources and goods imposes on a society. Supply and demand concepts, the effects of controls on the economy, unemployment and inflation, and the principles of international trade and finance are also discussed.

Note: Students will not receive UC credit for Economics 5 if taken after ECON 1 or ECON 2.

EDUC 101 - Introduction to the Field of Education

1 unit

1 hour lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course is designed to help students explore a variety of careers in education and to prepare them for future studies in the field. Course topics include the qualities of effective teachers and other school professionals as well as the challenges and rewards of various careers in education. Types of credentials and credential programs, subject area coursework, state examinations, educational and technological resources, state standards, and professional portfolios will be discussed. Throughout the course, students will also conduct ten hours of off-site fieldwork.

EDUC 201 - Foundations in Education

3 units

3 hours lecture

Prerequisite: EDUC 101 with a minimum grade of C and eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course introduces students to concepts and issues related to teaching children with diverse backgrounds in preschool through grade twelve. Course topics include teaching as a profession and career, contemporary educational issues, California's content and performance standards, the social historical context of teaching in the United States and teaching credential requirements. Throughout the course, students will contribute materials to their portfolios and will conduct a minimum of 45 hours of pre-approved, structured fieldwork in diverse classroom settings.

EDEV 10 - English Grammar for Deaf and Hard-of-Hearing Students

2 units
2 hours lecture, 2 hour lab
Credit, not degree applicable

This course introduces deaf and hard-of-hearing students to the basic principles of grammar, sentence structure, and vocabulary. Students will develop clear, concise sentences and write short paragraphs.

Note: This course is taught in American Sign Language and designed for students who are deaf and hard-of-hearing. Pass/no pass only.
(formerly Educational Development 10abcd)

EDEV 11 - Writing and Reading for Deaf and Hard-of-Hearing Students

2 units
2 hours lecture, 2 hours lab
Credit, not degree applicable

This is a comprehensive writing and reading course for deaf and hard-of-hearing students. It incorporates the use of the writing process, developing writing skills, building basic reading skills and vocabulary development. Students will write in response to selected short stories and personal experiences presented in the sign language. Emphasis is placed on the development of efficient writing and reading skills that include pre-reading strategies, making inferences, using contextual clues and identifying the main idea.

Note: This course is taught in American Sign Language and designed for students who are deaf and hard-of-hearing. Pass/no pass only.
(formerly Educational Development 11abcd)

EDEV 29 - Individualized Assessment of Learning

1 unit
1 hour lecture
Credit, not degree applicable

This course is designed to provide strategies for academic success for students with special learning needs. Individual assessments of learning strengths and weaknesses will be completed, which may determine eligibility for accommodations through the Special Resource Center. In addition, this course will introduce concepts of disability management and self-advocacy in the college setting. Students will learn to identify their individual learning styles and develop their individual learning profile.

Note: Recommended referral by Special Resource Center is advised. Pass/no pass only.

EDEV 32 - Psychology of Affective Learning

3 units
3 hours lecture
Credit, not degree applicable

This course examines the relationship and importance of self-awareness and personal attitude to help students change aspects of their motivation and learning strategies to promote academic performance and college success. The course emphasizes self-management, including various techniques and approaches that facilitate self-awareness, academic confidence, effective study strategies, and learning habits to increase success in college and life.

Note: This course is appropriate for students with disabilities. Pass/no pass only.
(formerly Educational Development 32ab)

EDEV 33 - Specific Learning Strategies

3 units
3 hours lecture
Credit, not degree applicable

Students with learning challenges are taught specific techniques, learning systems and strategies which enable them to effectively acquire, integrate, store, and retrieve information to improve learning and test performance for greater college success.

Note: This course is appropriate for students with disabilities. Pass/no pass only.
(formerly Educational Development 33ab)

EDEV 35 - Reading Skills for Students with Learning Differences

3 units

3 hours lecture, 1 hour lab

Credit, not degree applicable

This course, designed for students who have a processing deficit in reading, will emphasize a variety of learning strategies and electronic technologies. Learners will increase their reading vocabulary, level of reading comprehension, and fluency in processing the printed word. Students will gain greater awareness of their learning preferences and how to apply them to increase their reading and learning levels. Students will construct a learning system which will facilitate their ability to read, to understand, and to critically evaluate reading material.

Note: This course is appropriate for students with disabilities. Pass/no pass only.
(formerly Educational Development 35ab)

EDEV 36 - Writing Skills for Students with Learning Differences

3 units

2 hours lecture, 2 hours lab

Recommended Preparation: Students should ideally read with fluency and comprehension skills commensurate at a sixth grade reading level

Credit, not degree applicable

This course is designed for students with learning differences who need to improve basic writing skills. A process approach to writing is integrated with reading assignments to provide a variety of writing experiences. Students practice learning strategies related to writing and receive individualized instruction to increase writing skills and to prepare for regular English classes.

Note: This course is appropriate for students with disabilities. Pass/no pass only.
(formerly Educational Development 36ab)

EDEV 37 - Increased Learning Performance: English

1 unit

3 hours lab

Enrollment Limitation: concurrent enrollment in an El Camino College English course

Credit, not degree applicable

In this laboratory course, students will increase learning performance and study skills which relate to content of other El Camino College English courses. Students will enhance their critical thinking and time management skills. Students will evaluate appropriate campus resources and assistive technologies which may promote academic success in reading and writing courses.

Note: This course is appropriate for students with disabilities. Pass/no pass only.

EDEV 38 - Increased Learning Performance: Mathematics

1 unit

3 hours lab

Enrollment Limitation: concurrent enrollment in an El Camino College Mathematics course

Credit, not degree applicable

In this laboratory course, students will increase learning performance and study skills which relate to content of the El Camino College Mathematics course in which the student is concurrently enrolled. Students will enhance their critical thinking and time management skills. Students will evaluate appropriate campus resources and assistive technologies which promote academic success in math.

Note: This course is appropriate for students with disabilities. Pass/no pass only.

EDEV 41 - Assistive Computer Technology Laboratory

1 unit

3 hours lab per week to be arranged

Recommended Preparation: basic computer literacy skills and ability to type 5 words per minute

Credit, not degree applicable

This computer laboratory course is designed to enhance computer skills of students with disabilities. Students will select disability specific programs and/or assistive technology suited to their particular needs and will improve their skills and competencies in personal computer usage.

Note: This course is appropriate for students with disabilities. Pass/no pass only.
(formerly Educational Development 41abcd)

EDEV 121 - Career Preparation

2 units

2 hours lecture, 2 hours lab

Recommended Preparation: ENGL 82 and EDEV 140

Credit, degree applicable

Transfer CSU

This course assists students in selecting a career and developing effective job-seeking skills. Students will complete inventories for interests, personality, work values, and motivated skills and will then research various careers, including the education required. In addition, students will practice the steps needed to attain employment and will identify laws and agencies which protect the rights of the disabled in the workplace.

Note: This course is appropriate for students with disabilities. This course is occasionally taught in American Sign Language and is designed for students who are deaf or hard-of-hearing.
(formerly Educational Development 21)

EDEV 122 - Personal Assessment

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 84

Credit, degree applicable

Transfer CSU

This course is designed to help students develop a better understanding of personal motivation as they establish short and long-term goals. Students will also explore their personal value system, the concepts of stress management, defense mechanisms, interpersonal communication, and time management.

Note: This course is appropriate for students with disabilities.
(formerly Educational Development 22)

EDEV 140 - Assisted Computer Literacy

2 units

2 hours lecture, 1 hour lab

Recommended Preparation: minimum typing speed of 5 words per minute

Credit, degree applicable

Transfer CSU

This introductory computer course is designed to instruct students with disabilities in the use of assistive computer technology appropriate to the individual's functional limitations. The student will acquire basic computer literacy skills with an emphasis on word processing in the Windows environment.

Note: Letter grade or pass/no pass option. This course is appropriate for students with disabilities.
(formerly Educational Development 40)

ECHT 11 - Introduction to Electronics

3 units

2 hours lecture, 4 hours lab

Credit, degree applicable

Transfer CSU

This course is an introduction to electronics and provides the basis for further studies in electronics and computer hardware technology. Topics include safety, the basic theory and applications of electricity, analysis of circuit values using a standard scientific calculator, component identification and schematic diagrams, the techniques of electrical measurement and employment opportunities. Also introduced are alternating current measurements and the use of the oscilloscope. Electrical/electronic devices employed in automotive and air conditioning systems are also covered.

ECHT 22 - Basic Electronic Fabrication

3 units

2 hours lecture, 4 hours lab

Credit, degree applicable

Transfer CSU

This course focuses on the materials and the processes used for fabricating electronic systems. The process includes designing, assembling, testing, and documenting a basic electronic fabrication project. Topics covered will include safety, component identification, schematic diagrams, assembly pictorials, soldering (both printed wire boards and terminals), inspection, sheet metal fabrication, hand-tool use, cabling, wire wrapping, printed circuit board construction and repair, Continuous Improvement Techniques (CIT), and Electrostatic Discharge (ESD) awareness. Mass production will be stressed for practical experience in all areas.

ECHT 95 - Cooperative Work Experience Education

2-4 units

hours to be arranged

Enrollment Limitation: Employment or volunteer work in a position related to the student's major or career goal by the second week of the semester. Completion of or current enrollment in one course from the major.

Credit, degree applicable

Transfer CSU*

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Electronics and Computer Hardware Technology field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

Note: *Transfer limitations apply. The total units earned for Cooperative Work Experience Education may not exceed 16 units. (formerly Electronics and Computer Hardware Technology 95abcd)

ECHT 99 - Independent Study

1-3 units

hours to be arranged

Enrollment Limitation: two courses in Electronics and Computer Hardware Technology with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work

Credit, degree applicable

Transfer CSU*

This course provides special advanced studies in a subject field of Electronics and Computer Hardware Technology not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Electronics and Computer Hardware Technology projects (54 hours per unit).

Note: *Transfer limitations apply. For eligibility requirements, go to www.elcamino.edu/admissions/credit.asp (formerly Electronics and Computer Hardware Technology 99abc)

ECHT 110 - Introduction to Direct and Alternating Current Circuits

3 units

2 hours lecture, 4 hours lab

Prerequisite: ECHT 11 with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course examines advanced topics in the principles of direct and alternating current electricity through the correlation of theory and laboratory experiments. Basic circuit analysis forms the core of the course. Included in this class are the use of calculators, computer circuit simulation and many types of electrical/electronic test equipment to perform electrical measurements, and yield analysis.

ECHT 120 - Semiconductor Circuits I

3 units

2 hours lecture, 4 hours lab

Recommended Preparation: ECHT 11 or equivalent

Credit, degree applicable

Transfer CSU

This course provides the student with a background in modern solid-state devices for electronic technician work or troubleshooting. Emphasis is placed on testing devices, combined with study of typical applications. The course of study includes the student construction of an Amplitude Modulation AM radio and experience with computer simulation of laboratory experimentation.

ECHT 122 - Semiconductor Power Devices

3 units

2 hours lecture, 4 hours lab

Recommended Preparation: ECHT 11 or equivalent

Credit, degree applicable

Transfer CSU

This course gives the student an advanced background in solid-state devices such as transistors, Field Effect Transistors (FETs) and Silicon Controlled Rectifiers (SCRs). Practical laboratory experience similar to circuitry used in the electronics industry is included.

ECHT 124 - Operational Amplifiers and Linear Integrated Circuits

3 units

2 hours lecture, 4 hours lab

Recommended Preparation: ECHT 11 or equivalent

Credit, degree applicable

Transfer CSU

This course focuses on linear integrated circuit techniques, including operational amplifiers, comparators, phase locked loops, multiplexers and audio amplifiers. Laboratory activities include telecommunications, instrumentation, industrial electronics and practical measurement methods. In both lecture and laboratory exercises, students study circuits common to electronic systems, in addition to new, novel and useful circuit concepts.

ECHT 130 - Digital Systems and Computer Logic I

3 units

2 hours lecture, 4 hours lab

Recommended Preparation: ECHT 11

Credit, degree applicable

Transfer CSU

This is an introductory course in digital logic circuit theory and practice used in contemporary computer, control, instrumentation and security systems. The course begins with the development of simple digital elements, which are combined in increasingly complex functions to perform higher-level logic functions. The laboratory exercises give the student the opportunity to verify the ideas presented in lecture, and explore the capabilities and limitations of commonly used logic circuits.

ECHT 140 - Computer Systems and Hardware Technologies I

4 units

3 hours lecture, 4 hours lab

Recommended Preparation: ECHT 11 and CIS 13 or equivalent

Credit, degree applicable

Transfer CSU

This course provides a general study of computer hardware systems and their underlying operating technologies. Topics covered include an overview of microprocessor-based computer systems, binary and hexadecimal numbering systems, computer system hardware components and peripherals, operating systems, basic hardware failures, and test and verification of proper computer systems operation. Students work in teams to develop analytical skills and techniques.

Note: Letter grade or pass/no pass option.

ECHT 142 - Computer Systems and Hardware Technologies II

4 units

3 hours lecture, 4 hours lab

Prerequisite: ECHT 140 with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course provides a comprehensive study of advanced computer hardware systems and associated technologies. Topics will include an in-depth analysis of microprocessor-based architectures and their related computer hardware system components and peripheral devices. Installation and configuration of the system hardware, advanced hardware and software integration skills, including conflict resolution, troubleshooting and optimization strategies will be taught.

Note: Letter grade or pass/no pass option.

ECHT 144 - CompTIA A+ Certification Preparation for Computer Hardware Systems

4 units

3 hours lecture, 4 hours lab

Prerequisite: ECHT 140 with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course is designed for the student pursuing a career as a computer service technician. Students will develop the skills and knowledge required for passing the CompTIA A+ Certification exam. Topics covered include safety, basics of electricity and electronics, microcomputer hardware and components, Complementary Metal Oxide Semiconductor (CMOS) settings, operating systems, printers, portable systems, smartphones and networking hardware.

Note: Letter grade or pass/no pass option.

ECHT 146 - CompTIA Network+ Certification Preparation for Computer Hardware Systems

4 units

3 hours lecture, 4 hours lab

Prerequisite: ECHT 140 with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course is designed for the student pursuing a career as a computer service technician. Students will develop the skills and knowledge required for passing the CompTIA Network+ Certification exam. Topics include set up configuration and troubleshooting of networking hardware devices. Other areas explored include networking topology, cabling, wireless devices, network standards, protocols and security.

Note: *Transfer limitations apply. Letter grade or pass/no pass option.
(formerly Electronics and Computer Hardware Technology 146ab)

ECHT 148 - CompTIA Security+ Certification Preparation for Computer Hardware Systems

4 units

3 hours lecture, 4 hours lab

Prerequisite: ECHT 140 with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course is designed for the student pursuing a career as a computer service technician. Students will develop the skills and knowledge required for passing the CompTIA Security+ Certification exam. Topics include information security, system threats and risks, protecting systems, network vulnerabilities, network defenses, wireless network security, security audits and policies, cryptographic methods, and the basics of computer forensics.

Note: *Transfer limitations apply. Letter grade or pass/no pass option.
(formerly Electronics and Computer Hardware Technology 148ab)

ECHT 191 - Introduction to Microprocessors and Interfacing

3 units

2 hours lecture, 4 hours lab

Prerequisite: ECHT 11 or ECHT 130 or ETEC 14 or MTEC 70 with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course is an introduction to industrial microprocessors (microcontrollers) as they relate to industrial and consumer equipment. Included are the fundamentals of computer languages, use of software to simulate hardware, digital and analog interfacing, data storage, and troubleshooting.

ENGR 1 - Introduction to Engineering

2 units

2 hours lecture

Credit, degree applicable

Transfer CSU, UC

This course is an orientation to the preparation, training, practice, obligations and ethics of the engineering profession, as well as an introduction to the various engineering disciplines. Speakers from various fields present opportunities and challenges in the engineering profession. Academic success strategies related to the study of engineering are emphasized.

ENGR 9 - Engineering Mechanics - Statics

3 units

3 hours lecture

Prerequisite: PHYS 1A and MATH 191 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

In this course, students will explore resultants and components of concurrent forces moments of forces with respect to points and axes equivalent systems of forces and moments equilibria of particles and rigid bodies in two and three dimensions distributed forces centroids and centers of gravity analysis of structures forces in beams friction moments and products of inertia, and energy methods.

EETC 10 - Principles of Engineering Technology

3 units

2 hours lecture, 4 hours lab

Credit, degree applicable

Transfer CSU

In this course, students will explore technology systems and engineering processes to learn how math, science, and technology impact our society. The topics introduced include the design process, communication and documentation, engineering systems, statics, properties of materials, quality assurance, materials testing, and engineering for reliability.

EETC 10A - Principles of Engineering Technology I

1.5 units

1 hour lecture, 2 hours lab

Credit, degree applicable

Transfer CSU

This is the first of two courses in which students will explore technology systems and engineering processes to learn how math, science, and technology impact our society. The topics introduced include the design process, communication, documentation, and engineering systems.

Note: The two-course sequence Engineering Technology 10A and EETC 10B is the same as EETC 10.

EETC 10B - Principles of Engineering Technology II

1.5 units

1 hour lecture, 2 hours lab

Recommended Preparation: EETC 10A

Credit, degree applicable

Transfer CSU

This is the second of two courses in which students will explore technology systems and engineering processes to learn how math, science, and technology impact our society. The topics introduced include statics, properties of materials, quality assurance, materials testing, and engineering for reliability.

Note: The two-course sequence EETC 10A and 10B is the same as EETC 10.

EETC 12 - Introduction to Engineering Design

3 units

2 hours lecture, 4 hours lab

Credit, degree applicable

Transfer CSU

In this course, student are introduced to the basics of the design process used in engineering fields and the application of computer modeling software. Emphasis is placed on the design process, geometric relationships, visualization, technical sketching, modeling, model documentation, assemblies and production processes.

EETC 12A - Introduction to Engineering Design I

1.5 units

1 hour lecture, 2 hours lab

Credit, degree applicable

Transfer CSU

This course is the first of two courses in which students are introduced to the basics of the design process used in engineering fields and the application of computer modeling software. Emphasis is placed on the design process, geometric relationships, visualization, and technical sketching.

Note: The two-course sequence Engineering Technology 12A and EETC 12B is the same as EETC 12.

ETEC 12B - Introduction to Engineering Design II

1.5 units

1 hour lecture, 2 hours lab

Recommended Preparation: ETEC 12A

Credit, degree applicable

Transfer CSU

This course is the second of two courses in which students are introduced to the basics of the design process used in engineering fields and the application of computer modeling software. Emphasis is placed on, modeling, model documentation, assemblies and production processes.

Note: The two-course sequence ETEC 12A and 12B is the same as ETEC 12.

ETEC 14 - Electronics for Engineering Technologists

3 units

2 hours lecture, 4 hours lab

Credit, degree applicable

Transfer CSU

In this course, students are introduced to the application of electronics in engineering technology. The topics studied include safety, Ohm's Law, engineering notation, direct current circuits, capacitance, inductance, reactance, impedance, analog and digital waveforms, basic motors, number systems, logic gates, Boolean algebra, flip-flops, shift registers, and micro-processors. Techniques in computer simulation and electrical measurements will be stressed.

ETEC 14A - Electronics for Engineering Technologists I

1.5 units

1 hour lecture, 2 hours lab

Credit, degree applicable

Transfer CSU

This is the first of two courses in which students are introduced to the application of electronics in engineering technology. The topics studied include safety, Ohm's Law, engineering notation, direct current circuits, capacitance, inductance, reactance, and impedance. Techniques in computer simulation and electrical measurements will be stressed.

Note: The two-course sequence Engineering Technology 14A and ETEC 14B is the same as ETEC 14.

ETEC 14B - Electronics for Engineering Technologists II

1.5 units

1 hour lecture, 2 hours lab

Recommended Preparation: ETEC 14A

Credit, degree applicable

Transfer CSU

This is the second of two courses in which students are introduced to the application of electronics in engineering technology. The topics studied include safety, analog and digital waveforms, basic motors, number systems, logic gates, Boolean algebra, flip-flops, shift registers, and micro-processors. Techniques in computer simulation and electrical measurements will be stressed.

Note: The two-course sequence ETEC 14A and 14B is the same as ETEC 14.

ETEC 15 - Aerospace Engineering

3 units

2 hours lecture, 4 hours lab

Credit, degree applicable

Transfer CSU

This course introduces student to the various aspects of aerospace engineering. Through hands-on projects and problems, students will learn about aerodynamics, astronautics, space-life sciences and systems engineering.

EETC 15A - Aerospace Engineering I

1.5 units
1 hour lecture, 2 hours lab
Credit, degree applicable
Transfer CSU

This is the first of two courses that introduces the various aspects of aerospace engineering. Through hands-on projects and problems, topics will include aerodynamics and astronautics.

Note: The two-course sequence Engineering Technology 15A and EETC 15B is the same as EETC 15.

EETC 15B - Aerospace Engineering II

1.5 units
1 hour lecture, 2 hours lab
Recommended Preparation: EETC 15A
Credit, degree applicable
Transfer CSU

This is the second of two courses that introduces the various aspects of aerospace engineering. Through hands-on projects and problems, topics will include astronautics, space-life sciences and systems engineering.

Note: The two-course sequence EETC 15A and 15B is the same as EETC 15.

EETC 16 - Computer Integrated Manufacturing

3 units
2 hours lecture, 4 hours lab
Credit, degree applicable
Transfer CSU

This course covers the integration of engineering technology principles and automation in manufacturing environments. Students will create three-dimensional designs with modeling software and produce actual components of their designs on Computer Numerically Controlled (CNC) machine tools. Additional topics covered include machine tool operations, simulations, Rapid Prototyping (RP), robotics, and manufacturing systems.

EETC 16A - Computer Integrated Manufacturing I

1.5 units
1 hour lecture, 2 hours lab
Credit, degree applicable
Transfer CSU

This is the first of two courses that cover the integration of engineering technology principles and automation in manufacturing environments. The topics covered include machine tool operations, simulations, and robotics.

Note: The two-course sequence Engineering Technology 16A and EETC 16B is the same as EETC 16.

EETC 16B - Computer Integrated Manufacturing II

1.5 units
1 hour lecture, 2 hours lab
Recommended Preparation: EETC 16A
Credit, degree applicable
Transfer CSU

This is the second of two courses that cover the integration of engineering technology principles and automation in manufacturing environments. Students will create three-dimensional designs with modeling software and produce actual components of their designs on Computer Numerically Controlled (CNC) machine tools. Additional topics covered include simulations, Rapid Prototyping (RP), and manufacturing systems.

Note: The two-course sequence EETC 16A and 16B is the same as EETC 16.

ETEC 18 - Engineering Design and Development

3 units

2 hours lecture, 4 hours lab

Prerequisite: ETEC 10 or ETEC 10A and ETEC 10B or ETEC 12 or ETEC 12A and ETEC 12B or CADD 5 with a minimum grade of C in prerequisite

Credit, degree applicable

Transfer CSU

In this capstone course, students work in teams to design and construct solutions to engineering problems. Emphasis will be placed on research methods, design problem statements, continuous improvement, cost analysis, prototyping, testing methods, project construction, and project presentation.

ETEC 18A - Engineering Design and Development I

1.5 units

1 hour lecture, 2 hours lab

Prerequisite: ETEC 10 or ETEC 10A and ETEC 10B or ETEC 12 or ETEC 12A and ETEC 12B or CADD 5 with a minimum grade of C

Credit, degree applicable

Transfer CSU

This is the first course in a two course sequence that covers engineering design and development concepts. In this capstone course, students work in teams to design and construct solutions to engineering problems. Emphasis will be placed on research methods, design problem statements, continuous improvement, cost analysis, and prototyping. Knowledge gained will be applied to a design solution of a problem assigned in the capstone project.

Note: The two-course sequence Engineering Technology 18A and ETEC 18B is the same as ETEC 18

ETEC 18B - Engineering Design and Development II

1.5 units

1 hour lecture, 2 hours lab

Prerequisite: ETEC 18A with a minimum grade of C

Credit, degree applicable

Transfer CSU

This is the second course in a two-course sequence that covers engineering design and development. In this capstone course, students work together in teams to design and construct solutions to engineering problems. Emphasis will be placed on testing methods, project construction, project presentation, and professional peer review.

Note: The two-course sequence ETEC 18A and 18B is the same as ETEC 18

ENGL A - Writing the College Essay

3 units

2 hours lecture, 2 hours lab

Recommended Preparation: qualification by appropriate assessment

Credit, degree applicable

This course is designed to strengthen college-level writing skills. Students will read and analyze articles and essays and will practice writing coherent, well-developed expository essays. Students will revise their writing using peer review and weekly one-on-one tutorials. Students will review functional grammar and sentence skills and be introduced to techniques of research and documentation.

Note: Pass/no pass only. Students who receive credit for both English A and ENGL 84 can count only one course for degree credit.

ENGL B - Introduction to College Writing

3 units

2 hours lecture, 2 hours lab

Recommended Preparation: qualification by appropriate assessment

Credit, not degree applicable

This course introduces students to the processes of creating, developing, and revising paragraphs and a short essay based on personal experiences, observations, and reactions to short reading selections. Students learn basic rules of grammar, mechanics, and usage. Students practice a variety of sentence types and paragraph structures. Students revise their writing with the assistance of weekly one-on-one tutorials.

Note: Pass/no pass only.

ENGL 1 - Integrated Reading/Writing

3 units

3 lecture hours

Recommended Preparation: qualification by assessment

Credit, degree applicable

This course integrates the reading and writing processes to prepare students for transfer-level reading and writing tasks. Students develop college-level reading comprehension and strengthen expository writing skills.

ENGL 1A - Reading and Composition

4 units

4 hours lecture

Prerequisite: credit in ENGL A and credit in ENGL 84 or ESL 53C with a minimum grade of C and ESL 52B with a minimum grade of C or ENGL 1 or qualification by appropriate assessment

Credit, degree applicable

Transfer CSU, UC*

This course is designed to strengthen the students' ability to read with understanding and discernment, to discuss assigned readings intelligently, and to write clearly. Emphasis will be placed on the ability to write an essay in which each paragraph relates to a controlling idea, has an introduction and conclusion, and contains primary and secondary support. College-level reading material will be assigned to provide the stimulus for class discussion and writing assignments, including a required research paper.

Note: The maximum UC credit allowed for students completing English 1A, Reading and Composition is one course.

ENGL 1AH - Honors Reading and Composition

4 units

4 hours lecture

Prerequisite: credit in ENGL A and credit in ENGL 84 or ESL 53C with a minimum grade of C and ESL 52B with a minimum grade of C or ENGL 1 or qualification appropriate assessment

Credit, degree applicable

Transfer CSU, UC

This honors course, intended for students in the Honors Transfer Program, is designed to strengthen students ability to read with understanding and discernment, to discuss assigned readings intelligently, and to write clearly. Emphasis will be placed on the ability to write an essay in which each paragraph relates to a controlling idea, has an introduction and conclusion, and contains primary and secondary support. College-level reading material will be assigned to provide the stimulus for class discussion and writing assignments, including a required research paper. This course is enriched through extensive, rigorous reading, writing, and research assignments.

Note: Students may take either ENGL 1A or English 1AH. Duplicate credit will not be awarded for ENGL 1A and English 1AH.

ENGL 1AS - Reading and Composition Support

2 units

2 hours lecture

Corequisite: ENGL 1A

Credit, not degree applicable

Transfer CSU, UC*

This is a supplemental writing course taught in conjunction with ENGL 1A. It is designed for students who would have traditionally placed into ENGL 1A and ENGL 84 but choose to enroll in ENGL 1A. Students receive instruction in the basic elements of the college essay and receive additional support for topics covered in ENGL 1A.

Note: Letter grade or pass/no pass option.

ENGL 1B - Literature and Composition

3 units

3 hours lecture

Prerequisite: ENGL 1A or ENGL 1AH with a minimum grade of C in prerequisite

Credit, degree applicable

Transfer CSU, UC

This course is designed to stimulate an enjoyment of literature and to develop interpretive, critical, and analytical reading skills. Students will also receive extensive instruction on writing critically about short stories, full-length works (such as novellas, novels, plays, or biographies), and poems. The course will include critical analysis and research involving one or more literary genres.

ENGL 1BH - Honors Literature and Composition

3 units

3 hours lecture

Prerequisite: ENGL 1A or ENGL 1AH with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This honors course, intended for students in the Honors Transfer Program, is designed to stimulate an enjoyment of literature and to develop interpretive, critical, and analytical reading skills. Students will also receive extensive instruction on writing critically about short stories, full-length works (such as novellas, novels, plays, or biographies), and poems. This course will include critical analysis and research involving one or more literary genres. This course is enriched through extensive, rigorous reading, writing, and research assignments.

Note: Students may take either ENGL 1B or English 1BH. Duplicate credit will not be awarded for ENGL 1B and English 1BH.

ENGL 1C - Critical Thinking and Composition

3 units

3 hours lecture

Prerequisite: ENGL 1A or ENGL 1AH with a minimum grade of C in prerequisite

Credit, degree applicable

Transfer CSU, UC

This course focuses on the development of critical thinking skills. Students will apply these skills to the analysis of written arguments in various forms and genres, both classic and contemporary, and to the writing of effective persuasive essays. Students will learn to evaluate and interpret data, to recognize assumptions, to distinguish facts from opinions, to identify and avoid logical fallacies, to employ deductive and inductive reasoning, and to effectively assert and support argumentative claims.

ENGL 1CH - Honors Critical Thinking and Composition

3 units

3 hours lecture

Prerequisite: ENGL 1A or ENGL 1AH with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This honors course, intended for students in the Honors Transfer Program, focuses on the development of critical thinking skills. Students will apply these skills to the analysis of written arguments in various forms and genres, both classic and contemporary, and to the writing of effective persuasive essays. In class and while doing research of electronic and print media, students will learn to evaluate and interpret data, to recognize assumptions, to distinguish facts from opinions, to identify and avoid logical fallacies, to employ deductive and inductive reasoning, and to effectively assert and support argumentative claims. This course is enriched through extensive, rigorous reading, writing, and research assignments.

Note: Students may take either ENGL 1C or English 1CH. Duplicate credit will not be awarded for ENGL 1C and English 1CH.

ENGL 12 - Introduction to Fiction

3 units

3 hours lecture

Prerequisite: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course focuses on reading and interpreting the short story and the novel, and analyzing the evolution, scope, and form of each genre. Students study the elements, themes, and styles of short stories and novels, as well as the contributions of individual authors to each genre.

ENGL 15A - Survey of British Literature I

3 units

3 hours lecture

Prerequisite: ENGL 1A or ENGL 1AH with a minimum grade of C in prerequisite

Credit, degree applicable

Transfer CSU, UC

This course is a survey of British literature from the Anglo-Saxon period through the 18th century. Particular attention will be given to tracing the growth of English, Irish, Scottish and Welsh culture and identity in relation to the literature. The selections may include Beowulf, The Tain, and Everyman, as well as readings from Chaucer, Julian of Norwich, Kempe, Spenser, Lanyer, Shakespeare, Cary, Donne, Milton, Cavendish, Dryden, Behn, Pope, Swift, Johnson, and Sheridan.

ENGL 15B - Survey of British Literature II

3 units

3 hours lecture

Prerequisite: ENGL 1A or ENGL 1AH with a minimum grade of C in prerequisite

Credit, degree applicable

Transfer CSU, UC

This course is a survey of British literature by English, Irish, Scottish, and Welsh writers that begins with the Romantic Age and continues to the present. The course includes selections from major Romantic, Victorian, Modern and Postmodern authors, which may include Equiano, Burns, Blake, the Wordsworths, Coleridge, Byron, the Shelleys, Keats, Tennyson, the Brownings, the Brontes, Arnold, Hardy, Yeats, Conrad, Joyce, Eliot, Woolf, Lawrence, Beckett, Heaney, Pinter, and others.

Note: ENGL 15A is not a prerequisite to English 15B

ENGL 20 - Shakespeare's Plays - Tragedies and Romances

3 units

3 hours lecture

Prerequisite: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course introduces students to Shakespeare's tragedies and romances. The major goals of the course are to help students understand the works, analyze the language, and read and evaluate critical analyses. Students will become familiar with the Elizabethan era and learn to appreciate the universality of Shakespeare's art.

ENGL 21 - Shakespeare's Plays - Comedies and Histories

3 units

3 hours lecture

Prerequisite: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course introduces students to representative comedies and histories of William Shakespeare. The major goals of the course are to help students understand the plays, analyze the language, read and evaluate critical material written on plays, become familiar with the Elizabethan era, and value the universal themes and entertaining qualities of Shakespeare's plays.

ENGL 23A - Introduction to Creative Nonfiction

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This course is an introduction to creative nonfiction, which includes memoir writing, literary nonfiction, and the personal essay. Students will study the techniques of creative nonfiction through the examination of diverse authors and will work towards transforming real-life events and experiences into finished narratives using the same techniques as fiction, such as character development, dialogue, setting, and conflict. Students will also learn the development of the creative process, including writing exercises, peer workshop, and revision.

Note: Letter grade or pass/no pass option.

ENGL 24A - Creative Writing: Introduction to Poetry

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This course is an introduction to the creative process of writing poetry. Students will write their own poems, both traditional and contemporary, using common poetic elements, conventions, and techniques. This course also develops students' peer editing skills, introducing them to the workshop model and revision process.

Note: Letter grade or pass/no pass option.

ENGL 24B - Creative Writing: A Workshop in Poetry

3 units

3 hours lecture

Prerequisite: ENGL 24A with a minimum grade of C or pass

Credit, degree applicable

Transfer CSU

This course develops intermediate skills in the craft of poetry writing through instruction and workshop. Students will discuss student writing and texts written by established poets and continue to apply complex poetic types, elements, and techniques to their own work. Additionally, students will assess and critique their own and other students' original poems, furthering the development of their critical sense in writing and revising their own poems.

ENGL 25A - Creative Writing: Introduction to the Craft of Fiction

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This course is an introductory level creative writing course focusing on writing the short story. In addition to outlining and composing well-crafted stories, students will study the techniques of plot, characterization, point of view, conflict, and setting. Students will also learn about peer editing and the workshop model for revising stories.

Note: Letter grade or pass/no pass option.

ENGL 25B - Creative Writing: A Workshop in Fiction and Nonfiction

3 units

3 hours lecture

Prerequisite: ENGL 25A with a minimum grade of C or Pass

Credit, degree applicable

Transfer CSU

This course develops intermediate skills in the craft of fiction and nonfiction writing through instruction and workshop. Students discuss and apply complex strategies for establishing character, setting, conflict, dialogue, and the advancement of theme. In addition, students practice literary nonfiction storytelling techniques such as creating narrative tension through atmosphere, symbolism, and voice. Students then assess and critique their own and other students' original stories and personal narratives, furthering the development of their critical sense in writing and revising their own literary works.

Note: Letter grade or pass/no pass option.

(formerly English 32)

ENGL 27 - Children's Literature

3 units

3 hours lecture

Prerequisite: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course surveys the historical and cultural development of children's literature and includes critical approaches and the examination of shared themes that cross cultural and geographical boundaries. Students read both classic and contemporary works spanning cultures and time periods and reflect on the significance of a genre written specifically for children.

ENGL 28 - Images of Women in Literature

3 units

3 hours lecture

Prerequisite: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course examines images of women in a variety of literary forms, including poetry, short stories, novels, plays, folklore, fairy tales, and nonfiction prose. Students become familiar with female archetypes, women's roles, and women's themes as presented by both male and female writers, examining traditional and revisionist approaches.

ENGL 30 - The English Bible as Literature

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course is a study of the types of literature used in both the Old and New Testaments of the English Bible. Readings and discussions emphasize analysis of such forms as the short story, poetry, letters, biographical literature, and historical literature.

ENGL 31 - Mythology and Folklore

3 units

3 hours lecture

Prerequisite: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course is a survey of Babylonian, Egyptian, Hebrew, Greek, Hispanic, Germanic, Indian, and other mythologies. Through readings of essays and literature, students explore the similarities and differences of folklore and mythology and identify cultural patterns in the literature.

ENGL 34 - The Short Story

3 units

3 hours lecture

Prerequisite: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course focuses on reading and interpreting the short story and analyzing the evolution, scope, and form of the genre. Students will study the elements, themes, and styles of American and English short stories, as well as literature in translation.

ENGL 35 - World Literature: 3500 BCE to 1650 CE

3 units

3 hours lecture

Prerequisite: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course examines masterpieces of world literature from the ancient world through the mid-17th century as both reflections and progenitors of their cultures and, eventually, nations of origin. Students explore the universal concerns of humankind as exemplified through the themes, forms, and trends of the literary works.

ENGL 36 - World Literature: 1650 CE to Present

3 units

3 hours lecture

Prerequisite: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course examines masterpieces of world literature from the mid-17th through 21st centuries as both reflections and progenitors of their cultures and nations of origin. Students explore the universal concerns of humankind as exemplified through the themes, forms, and trends of the literary works.

ENGL 39 - Literature and Film

3 units

3 hours lecture

Prerequisite: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

In this course, students compare original literary works and genres with their film adaptations. Students view films based on novels and short stories and assess how cinematic and literary techniques are employed to convey meaning.

ENGL 40A - American Literature I

3 units

3 hours lecture

Prerequisite: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course surveys American literature from its beginnings through the Civil War. Coverage, which recognizes the contribution of women and of ethnic and other minorities to the national literature, includes the narratives of native peoples, the literature of discovery and exploration, the literature of European settlement, the literature of Pre-Revolutionary America, the literature of an emerging nation, and the literature of pre-Civil War America.

ENGL 40B - American Literature II

3 units

3 hours lecture

Prerequisite: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course surveys American literature from the post- Civil War period to the present, including the literature of an expanding nation, the literature of modernism, the literature of post-World War II America, and contemporary American literature. The course recognizes the contribution of women and minority writers to the national literature.

ENGL 41B - Survey of Film: 1950 to the Present

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course focuses on screening, analyzing and writing about film as a narrative reflective of its time and culture. Students study representative film masterpieces from 1950 to the present by viewing films or portions of films. An emphasis is placed on ideas and values portrayed in the films with regards to how they reflect the concerns of particular nationalities and time periods. Students also analyze the growth and transformation of various artistic techniques used by the filmmakers, as well as trends in major transnational filmmaking and media conglomeration.

ENGL 42 - Chicano and Latino Literature

3 units

3 hours lecture

Prerequisite: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course will focus on the analysis and interpretation of Chicano and Latino essays, novels, short stories, dramas, and poems written in English translation. Students will explore a wide survey of classic and contemporary Chicano and Latino texts that reflect social and cultural influences, as well as examine the process of assimilation and self-identity of the Chicano and Latino as thematically represented in literature.

ENGL 43 - African American Literature

3 units

3 hours lecture

Prerequisite: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course provides a chronological and thematic survey of African American literature. Students will read and discuss representative works by African American writers. Emphasis will be on classic and contemporary literature.

ENGL 44 - The Literature of American Ethnic Groups

3 units

3 hours lecture

Prerequisite: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course provides a broad survey of American ethnic literatures. Students will explore and analyze representative texts by Native Americans, African Americans, Chicano-and Latino Americans, Jewish Americans, Asian and Pacific Islander Americans, and Arab Americans. Emphasis will be on contemporary literature.

ENGL 48 - Modern Literature of Latin America

3 units

3 hours lecture

Prerequisite: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course is a survey of modern literature from Latin American countries. Students explore themes common to selected major writers and identify cultural, political, and stylistic patterns in their works.

ENGL 60 - Prewriting Workshop

2 units

2 hours lecture

Credit, not degree applicable

In this course, students will learn strategies to increase their understanding and use of prewriting and planning techniques, which are important first steps in successfully completing college writing assignments.

Note: Pass/No Pass

(formerly Academic Strategies 20)

ENGL 61 - Test-Taking Strategies

2 units

2 hours lecture

Credit, not degree applicable

In this course, students examine how testing instruments (such as true/false, multiple choice, and essay questions) are structured. Students learn techniques designed to increase success on various types of achievement tests.

Note: Pass/no pass only.

(formerly Academic Strategies 30)

ENGL 62 - Vocabulary Building for College Students

2 units

2 hours lecture

Credit, not degree applicable

This course is designed to increase the student's vocabulary in reading, listening, writing and speaking by introducing words and concepts that are essential to academic success. A systematic method for continued vocabulary development is emphasized.

Note: Pass/no pass only.

(formerly Academic Strategies 22)

ENGL 63 - Spelling Techniques

2 units

2 hours lecture

Credit, not degree applicable

This course is designed to help students identify and correct common spelling errors and to provide practice using the appropriate rules of spelling necessary for college-level writing.

Note: Pass/no pass only.

(formerly Academic Strategies 23)

ENGL 64 - Memory Techniques

2 units

2 hours lecture

Credit, not degree applicable

This course is designed to introduce the student to methods of memory improvement and to provide practice in the techniques and their application to individual learning situations.

Note: Pass/no pass only.

(formerly Academic Strategies 33)

ENGL 65 - Listening and Notetaking Strategies

2 units
2 hours lecture
Credit, not degree applicable

This course is designed for the student who needs to improve listening for comprehension. They will learn to take organized notes, identifying main and subordinate points into meaningful categories.

Note: Pass/no pass only.
(formerly Academic Strategies 35)

ENGL 66 - Sentence Errors and Punctuation

2 units
2 hours lecture
Credit, not degree applicable

This course focuses on students locating and correcting in their own writing the most common and troublesome sentence structure errors. The correct use of punctuation is reviewed and practiced.

Note: Pass/no pass only.
(formerly Academic Strategies 36)

ENGL 67 - Thinking Skills for College Courses

2 units
2 hours lecture
Credit, not degree applicable

This course is designed to instruct students on how to analyze and use information, identify patterns, find the relationships in analogies and draw logical conclusions with precision and accuracy.

Note: Pass/no pass only.
(formerly Academic Strategies 25)

ENGL 78 - Creative Writing: Screenwriting

3 units
3 hours lecture
Prerequisite: eligibility for ENGL 1A
Credit, degree applicable
Transfer CSU

In this course, students learn the skills necessary to create original feature film screenplays. Themes, character, plot, and dialogue are discussed and developed by means of writing exercises. Script format and story structure are analyzed by reading feature film scripts and discussing produced film stories.

Note: Letter grade or pass/no pass option.
(formerly English 38ab)

ENGL 80 - Basic Language Skills

3 units
3 hours lecture, 1 hour lab
Recommended Preparation: qualification by testing (English Placement Test) and assessment
Credit, not degree applicable

This course is designed to improve basic reading and study skills necessary for academic success. Special emphasis will be placed on reading comprehension, strategies for understanding written, text, especially at the paragraph level, study and test-taking skills, and vocabulary expansion.

Note: Pass/no pass only.

ENGL 82 - Introduction to Reading Skills

3 units

3 hours lecture, 1 hour lab

Recommended Preparation: qualification by appropriate assessment

Credit, not degree applicable

This course is designed to improve general reading and thinking abilities through strengthening the following skills: comprehension, vocabulary, and study and test-taking techniques. Special emphasis will be placed on analysis of multi-paragraph passages.

Note: Pass/no pass only.

ENGL 84 - Developmental Reading and Writing

3 units

3 hours lecture, 1 hour lab

Recommended Preparation: qualification by appropriate assessment

Credit, degree applicable

This course is designed to prepare students to read college-level reading materials. Special emphasis will be placed on moving the students from a literal level of comprehension to a critical analysis of texts. Students will write short analytical responses and integrate a variety of reading strategies as they create meaning from texts.

Note: Students who receive credit for both English 84 and ENGL A can count only one course for degree credit. Pass/no pass only.

ENGL 98 - College Literary Magazine Editing and Publishing

3 units

2 hours lecture, 3 hours lab

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This course provides students with experience in literary journal publishing. Students will evaluate literary magazines, create submission guidelines, advertise for and collect submissions, learn about the literary journal printing process, proofread and edit submissions, and assist in designing and composing layouts. In addition, students will organize a public literary reading.

(formerly English 98abcd)

ENGL 99 - Independent Study in English

1-3 units

hours to be arranged

Enrollment Limitation: two English courses, one of which is English 1A, with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work

Credit, degree applicable

Transfer CSU*

This course provides special advanced studies in a subject field of English not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned English education projects (54 hours per unit).

Note: *Transfer limitations apply. For eligibility requirements, go to www.elcamino.edu/admissions/credit.asp (formerly English 99abc)

ENGL 100 - Supervised Tutoring: Writing Center Laboratory

0 units

12 hours lab per week to be arranged (216 maximum hours lab per semester)

Enrollment Limitation: referral by instructor or counselor based on assessed academic need

Non-credit

This course provides students with supervised tutorial instruction on writing text with clarity and reading text with literal and critical understanding this may include prewriting and pre-reading techniques, organization of text, development of arguments, relationships between parts of text, integration of writing and reading for research and revision/editing for clarity and correctness.

Note: This course is repeatable and open for enrollment at registration and at any time during the semester.

ESL 02A - Grammar and Conversation Level I

0 units

5 hours lecture

Recommended Preparation: concurrent enrollment in ESL 03A

Noncredit

This Level I grammar and conversation course provides English practice through listening, speaking, reading and writing activities. Emphasis is on the verb "to be" in the present and past tenses and the simple present tense of action verbs. Other topics covered are nouns, adjectives and prepositions.

ESL 02B - Grammar and Conversation Level II

0 units

5 hours lecture

Recommended Preparation: qualification by assessment or completion of ESL 02A and concurrent enrollment in ESL 03B

Noncredit

This Level II conversation and grammar course provides practice in English through listening, speaking, reading, and writing activities. Emphasis is on prepositions of time, possessive nouns and adjectives, present progressive and simple past tense, helping verbs, imperatives, and punctuation rules.

ESL 02C - Conversation and Grammar Level III

0 units

5 hours lecture

Recommended Preparation: qualification by assessment or completion of ESL 02A and ESL 02B and concurrent enrollment in ESL 03C

Noncredit

This Level III conversation and grammar course provides extensive focused practice on English grammar forms and structures through listening, speaking, reading, and writing activities. Emphasis is on past, present, and future verb tenses, and gerunds and infinitives.

ESL 02D - Conversation and Grammar Level IV

0 units

5 hours lecture

Recommended Preparation: qualification by assessment or completion of ESL 02C and concurrent enrollment in ESL 03D

Noncredit

This Level IV conversation and grammar course provides focused practice on English grammar forms and structures through listening, speaking, reading, and writing activities. Emphasis is on count and non-count nouns, including quantifiers; modals expressing advice, requests, desires, offers, and necessity; and the comparison forms of adjectives and adverbs.

ESL 03A - Reading and Writing Level I

0 units

5 hours lecture

Recommended Preparation: concurrent enrollment in ESL 02A

Noncredit

This beginning Level I reading and writing course is designed to develop basic reading skills, expand vocabulary, and develop basic writing skills. Students will move from sentence-level writing to short descriptive and chronologically-ordered paragraphs.

ESL 03B - Reading and Writing Level II

0 units

5 hours lecture

Recommended Preparation: qualification by assessment or completion of ESL 03A and concurrent enrollment in ESL 02B

Noncredit

This Level II reading and writing course is designed to improve reading comprehension, increase vocabulary, and improve critical thinking and writing skills. Students will write descriptive, biographical, narrative, and subjective paragraphs.

ESL 03C - Reading and Writing Level III

0 units

5 hours lecture

Recommended Preparation: qualification by assessment or completion of ESL 03B and concurrent enrollment in ESL 02C

Noncredit

This intermediate reading and writing course is designed to improve reading comprehension, increase vocabulary, and improve critical thinking and writing skills. Students will write paragraphs using chronological order, emphatic order, and spatial order.

ESL 03D - Reading and Writing Level IV

0 units

5 hours lecture

Recommended Preparation: qualification by assessment or completion of ESL 03C and concurrent enrollment in ESL 02D

Noncredit

This advanced reading and writing course is designed to provide students with strategies to improve reading comprehension and writing skills. Reading practice activities will be presented to increase vocabulary, to use context for determining meaning of texts, and to develop critical thinking skills. In writing, students will study a variety of grammatical structures and transitional expressions to help generate simple expository paragraphs.

ESL 04A - ESL for Healthcare

0 units

5 hours lecture

Recommended Preparation: ESL 03D

Noncredit

Designed for intermediate ESL learners, this course helps prepare students for careers in healthcare. Students gain a general knowledge of healthcare settings, careers, and terminology including the major body systems and their basic functions.

ESL 04B - ESL for Healthcare II

0 units

5 hours lecture

Recommended Preparation: ESL 04A

Noncredit

This second course in a two-course sequence develops the listening, speaking, reading, and writing skills of intermediate ESL students seeking a career in the healthcare field. Emphasis is on terminology and communication skills for interacting with patients and professionals in the medical field. Topics include communication, safety, medical emergencies, first aid, and pharmacology.

ESL 05A - ESL for Childhood Educators I

0 units

5 hours lecture

Recommended Preparation: ESL 03D

Noncredit

This first course in a two-course sequence prepares intermediate-level ESL students for a career in childcare, with special emphasis on vocabulary and entry-level skill acquisition as well as familiarity with common phrases for interacting with English speaking children, staff, and parents. Topics include basic childcare vocabulary, communicating about children, preventing incidents, reporting incidents, and treating illnesses and minor injuries. This course prepares students for the Childhood Education credit program.

ESL 05B - ESL for Childhood Educators II

0 units

5 hours lecture

Recommended Preparation: ESL 05A

Noncredit

This is the second course in a two-course sequence that prepares intermediate-level ESL students for a career in childcare, with special emphasis on vocabulary and entry level skill acquisition as well as familiarity with common phrases for interacting with English speaking children, staff, and parents. Topics include infant development, toddler development, preschooler development, and school-age child development. This course prepares students for the Childhood Education credit program.

ESL 06 - ESL Support for Career and Technical Programs

0 units

3 hours lecture

Recommended Preparation: ESL 03D

Noncredit

This course, designed for students whose primary language is not English, is intended for students currently enrolled in an entry-level vocational class. Students will receive instruction in writing, reading, speaking, vocabulary building and test taking skills designed to help them succeed in the content area course. Subsequent enrollment in an additional semester will provide the student with an opportunity for continued skills and competency development within the level and subject matter.

ESL 07A - ESL for Math I

0 units

3 hours lecture

Recommended Preparation: ESL 03D

Noncredit

ESL for Math I helps students acquire the English necessary to do basic math. Students practice their listening, speaking, reading, and writing skills related to math concepts such as numbers, measurement, addition, subtraction, multiplication, and division. This course provides ESL support for students who plan to take or who concurrently take MATH 12, MATH 23, or MATH 37.

ESL 07B - ESL for Math II

0 units

3 hours lecture

Recommended Preparation: ESL 03D

Noncredit

ESL for Math II helps students acquire the English necessary to succeed in algebra and geometry courses. Students practice their listening, speaking, reading, and writing skills related to algebra and geometry. This course provides ESL support for students who plan to take or who concurrently take MATH 40, MATH 60, MATH 67, MATH 73, and MATH 80.

ESL 07C - ESL for Math III

0 units

3 hours lecture

Recommended Preparation: ESL 03D

Noncredit

ESL for Math III helps students acquire the English necessary for statistics courses offered at El Camino College. Students practice their listening, speaking, reading, and writing skills related to statistical concepts. This course provides ESL support for students who plan to take or who concurrently take MATH 150 or MATH 67.

ESL 08 - ESL for Medical Terminology

0 units

3 hours lecture

Recommended Preparation: ESL 52A

Noncredit

In this high-intermediate ESL course students study key medical terms in anatomy and physiology and vocabulary for diseases, symptoms, procedures, common medical tests, and abbreviations. Emphasis is placed on word parts (prefixes, roots, and suffixes), pronunciation, and spelling. Students practice listening to and reading medical terms as well as utilizing them in writing and in speech. This course provides ESL support for students who plan to take or who concurrently take Medical Terminology I.

ESL 09A - ESL for Anatomy and Physiology I

0 units

3 hours lecture

Recommended Preparation: ESL 08

Noncredit

This first course in a two-course sequence prepares high-intermediate to advanced ESL students for credit anatomy and physiology courses. Several body systems and their functions as well as the basics of chemistry and cell biology are covered with reading, writing, speaking, and listening activities. Emphasis is on pronunciation, spelling, and study skills useful for success in healthcare programs. This course provides ESL support for students who plan to take or who concurrently take ANAT 30, ANAT 32, Anatomy and Physiology 34A, and Anatomy and Physiology 34B.

ESL 09B - ESL for Anatomy and Physiology II

0 units

3 hours lecture

Recommended Preparation: ESL 09A

Noncredit

This second course in a two-course sequence prepares high-intermediate to advanced ESL students for credit anatomy and physiology courses. Blood, body defenses, and the digestive, cardiovascular, respiratory, urinary, and reproductive body systems and their functions are covered with reading, writing, speaking, and listening activities. Emphasis on pronunciation and spelling for success in healthcare programs. This course provides ESL support for students who plan to take or who concurrently take ANAT 30, ANAT 32, Anatomy and Physiology 34A, and Anatomy and Physiology 34B.

ESL 10 - ESL for Radiological Technology I

0 units

3 hours lecture

Recommended Preparation: ESL 51A

Noncredit

This course is designed to help intermediate to advanced ESL learners acquire the listening and speaking skills necessary for communicating in the radiography field. Emphasis is on communicating with fellow radiographers and radiologists, other healthcare workers, and clients and their families. This course provides ESL support for students who plan to take or who concurrently take Radiologic Technology A

ESL 51A - Introduction to English in Conversation

4 units

5 hours lecture

Recommended Preparation: qualification by assessment

Credit, not degree applicable

This introductory course is designed to increase a student's English-speaking and comprehension skills in a supportive atmosphere. The course includes cross-cultural communication topics, role play and other small group activities, introduction to common American idioms and expressions, pronunciation exercises designed to improve intelligibility, and listening comprehension practice.

ESL 51B - Intermediate Listening, Speaking and Pronunciation

4 units

5 hours lecture

Prerequisite: ESL 51A with a minimum grade of C or qualification by assessment

Credit, degree applicable

Students in this course gain greater confidence and skill in listening to and speaking English by participating in activities such as listening to mini-lectures and taking notes; presenting impromptu speeches, prepared speeches, and oral reports; conducting surveys and interviews; role playing; and discussing and debating controversial topics. Students improve their pronunciation, intonation and stress, listening comprehension, and knowledge of American culture.

ESL 51C - Advanced Listening, Speaking and Pronunciation

4 units

5 hours lecture

Prerequisite: ESL 51B with a minimum grade of C or qualification by assessment

Credit, degree applicable

This course provides instruction in listening and speaking, emphasizing oral communication, pronunciation, and idiomatic expressions in a multi-cultural academic setting. Students practice listening to and taking notes on lectures from across the curriculum such as history, business, and science, and other listening material. Students present research-based speeches and participate in group discussions and panel presentations.

ESL 52A - Introduction to Reading and Vocabulary Building

4 units

5 hours lecture

Recommended Preparation: qualification by assessment

Credit, not degree applicable

This is an introductory course designed to transfer literacy in the first language to English by building basic reading skills and expanding vocabulary. Through the use of reading texts, reading kits, main idea exercises, and skimming and scanning activities, the foundation skills are developed through regular application. The aim of the course is to identify and reinforce good reading habits and to free students from over-dependence on dictionaries, with a focus on context as the key to meaning.

ESL 52B - Intermediate Reading and Vocabulary Building

4 units

5 hours lecture

Prerequisite: ESL 52A with a minimum grade of C or qualification by assessment

Credit, degree applicable

This is an intermediate level course designed to teach appropriate reading skills, such as the ability to make inferences, draw conclusions, understand the meaning of vocabulary words in context through word analysis and contextual clues, and determine the main idea from a passage. Students read from a variety of sources, including newspapers, essays, short stories, and novels. Students also increase their academic vocabulary through vocabulary building activities.

ESL 52C - Advanced Reading

4 units

5 hours lecture

Prerequisite: ESL 52B with a minimum grade of C or qualification by assessment

Credit, degree applicable

This advanced-level reading course teaches interpretive, critical, and analytical reading skills for closer reading and better understanding of fiction and nonfiction works. It includes an in-depth study of a novel, and the terminology necessary to discuss and write critically about works of various genres. Students also increase their vocabulary through vocabulary building activities.

ESL 53A - Elementary Writing and Grammar

4 units

5 hours lecture

Recommended Preparation: qualification by assessment

Credit, not degree applicable

This entry-level academic composition course offers students an intensive writing experience. Students will write well-organized and coherent paragraphs transitioning to multi-paragraph essays. Students will identify and address grammar problems in their writing.

ESL 53B - Intermediate Writing and Grammar

4 units

5 hours lecture

Prerequisite: ESL 53A with a minimum grade of C or qualification by assessment

Credit, degree applicable

Transfer CSU, UC*

This course offers students intensive experience in preparing to write college-level essays. Students will learn to write well-organized, coherent expository essays, including critical reactions to reading. They will review basic rhetorical modes such as summary, narration, description and process, and will be introduced to the rhetorical modes of comparison-contrast and argumentation. Simple, progressive and present perfect verbs, and other basic grammar rules will be reviewed, and passive voice, conditionals, past perfect, perfect modals, and other intermediate grammar topics will be introduced.

Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

ESL 53C - Advanced Essay Writing and Grammar

4 units

5 hours lecture

Prerequisite: ESL 53B with a minimum grade of C or qualification by assessment

Recommended Preparation: ESL 52B

Credit, degree applicable

Transfer CSU, UC*

This course strengthens college-level writing skills in preparation for ENGL 1A for students learning English as a second language. Students read articles, essays, poetry, and works of fiction or non-fiction. They write well-developed essays in response to their reading. Students review basic grammar and develop advanced grammar and sentence skills. Students are introduced to and use Modern Language Association (MLA) style and research skills to write a short research-based essay.

Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

ESL 100 - Supervised Tutoring: English Support Center

0 units

12 hours lecture

Enrollment Limitation: Referral by instructor or counselor based on assessed academic need.

Noncredit

This is a supervised tutoring course that provides English as a Second Language students with the listening, speaking, reading, and writing skills necessary for success on the specific assignments and assessments in the courses for which they seek tutorial support.

Note: This course is repeatable and open for enrollment at registration and at any time during the semester.

ET 95 - Cooperative Work Experience Education

2-4 units

hours to be arranged

Enrollment Limitation: Employment or volunteer work in a position related to the student's major or career goal by the second week of the semester. Completion of or current enrollment in one course from the major.

Credit, degree applicable

Transfer CSU*

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Environmental Technology field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

Note: *Transfer limitations apply. The total units earned for Cooperative Work Experience Education may not exceed 16 units. (formerly Environmental Technology 95abcd)

ET 99 - Independent Study

1-3 units

hours to be arranged

Enrollment Limitation: two courses in Environmental Technology with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work

Credit, degree applicable

Transfer CSU*

This course provides special advanced studies in a subject field of Environmental Technology not covered in the regular departmental listings. Regular conferences with the instructor are coordinated with assigned Environmental Technology projects (54 hours per unit).

Note: Transfer limitations apply. For eligibility requirements, go to www.elcamino.edu/admissions/credit.asp (formerly Environmental Technology 99abc)

ET 101 - Theory and Relevancy of Global Environmental Awareness

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This introductory course explores topics of sustainability. The topics range from a historical framework of environmentalism to urban ecology, the theories of regenerative landscape, landscape urbanism and deconstructivism in a post-industrial economy. Class discussion will include the role of commerce and governmental regulation and how it affects the emerging green economy. Additional topics include a 21st century view of how we interpret opportunities for revitalization and renovation of our urban spaces.

ET 102 - Sustainable Energy and Renewable Building Sciences and Technologies

3 units

3 hours lecture

Recommended Preparation: ET 101 and eligibility for ENGL 1A

Credit, degree applicable Transfer CSU

This course is designed to prepare students to survey and evaluate systems of sustainable and conventional energy creation, energy distribution, energy management, and introduces the developing rating systems that are quantifying and measuring green building and environmental system efficiency performance. "Green Regenerative" sciences and technologies will be emphasized. Areas of concentration will include: green building design and site selection, energy efficient designs and construction techniques, photovoltaic (PV) systems, solar thermal systems, wind energy, fuel cells, solid waste management, water conservation, and building energy rating systems.

(formerly Environmental Technology 1)

ET 103 - Environmental Technology Materials and Methodologies

3 units

2 hours lecture, 4 hours lab

Recommended Preparation: ET 102 and eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This course is the third in a series of courses that reviews the principles of sustainability and fosters an understanding of environmental awareness. This course introduces green alternative methodologies and the processes of using ecological and green products into everyday life. The principles of 'cradle to cradle' and regenerative processes will be examined and applied, in how we allocate, recycle and re-use our resources.

ET 165 - Sustainable and Regenerative Practices in Site and Landscape Development

3 units

2 hours lecture, 4 hours lab

Recommended Preparation: eligibility for ARCH 150A and ENGL 1A

Credit, degree applicable

Transfer CSU

This course explores sustainable and regenerative principles for site and landscape development. The course covers strategies for hillside development, grading and drainage including retention systems and Standard Urban Storm Water Mitigation Plan (SUSMP) methodologies. Other topics included are paving design including permeable paving, wall systems, water and energy efficient irrigation and lighting systems, as well as, drought tolerant landscape planting strategies.

ESTU 1 - Introduction to Ethnic Studies

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course provides a multidisciplinary introduction and analysis of ethnic groups in the United States. Various theories and perspectives will be examined to better comprehend the effects of institutional racism, marginalization, socio-economic and political discrimination, and ethnocentrism on American ethnic and racial groups.

ESTU 3 - The Chicano in Contemporary United States Society

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This course introduces the student to the complexity and diversity of contemporary Chicano society in the United States. The impact of American values on the socialization of Mexican Americans will be assessed with particular emphasis on political, economic, social, cultural and educational institutions.

ESTU 5 - Chicano Culture

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This course is an interdisciplinary study of Chicano culture in the United States. Emphasis is placed on the historical roots and development of the cultural contributions of Chicanos to American society in the arts, literature, language, music and other expressions of contemporary popular culture. Analysis of the central components of Chicano cultural values, norms and customs will also be assessed.

FASH 1 - Career Opportunities in Fashion

1 unit

1 hour lecture

Recommended Preparation: English A

Credit, degree applicable

Transfer CSU

This course surveys career opportunities in the fashion industry, including fashion design and fashion merchandising. Students will explore career choice possibilities in terms of their personality traits and will study the characteristics, technology and global interrelationships of segments of the fashion industry through readings, classroom exercises and industry contacts. Students will prepare a job search packet portfolio, including preparation of a resume, cover letter and business cards.

FASH 2 - Presentation Techniques for Fashion

1 unit

0.5 hour lecture, 1.5 hours lab

Prerequisite: ART 110 with a minimum grade of C or equivalent

Recommended Preparation: FASH 15 and FASH 16

Credit, degree applicable

Transfer CSU

This course covers the development of techniques for fashion presentation. Basic concepts and techniques of applied design, including media presentation methods and visual communication are studied.

FASH 4 - Computer Fashion Illustration

3 units

2 hours lecture, 4 hours lab

Recommended Preparation: FASH 15 and basic computer skills

Credit, degree applicable

Transfer CSU

This course introduces the use of illustration (vector) and photo-editing (raster) software (for example: Adobe Illustrator and Adobe Photoshop) to sketch, illustrate and design apparel and marketing material for fashion. Students will design and develop logos, hang tags, dressed croquis, apparel sketches, and mood boards for fashion advertising.

(formerly Fashion 4ab)

FASH 10 - Clothing Construction I

3 units

2 hours lecture, 3 hours lab

Credit, degree applicable

Transfer CSU

This course provides the analysis and application of basic clothing construction techniques used on woven and knit garments emphasizing pattern and fabric selection, seam and garment construction, and finishing. Topics will include the proper use and care of the sewing and overlock machines. The sewing projects include an elastic waist pant, tee shirt, lined vest and skirt.

(formerly Fashion 10ab)

FASH 11 - Clothing Construction II

3 units

2 hours lecture, 3 hours lab

Prerequisite: FASH 10 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

This course offers a study and development of contemporary garment construction using advanced techniques and procedures. Projects include garments made of a currently fashionable but "difficult to handle" fabric. Emphasis is placed on experimentation of the appropriate application of various techniques and procedures in constructing garments with workmanship.

(formerly Fashion 11ab)

FASH 14 - Apparel Production Techniques

1 unit

0.5 hours lecture, 1.5 hours lab

Prerequisite: FASH 4, FASH 10, FASH 15, and FASH 26A

Recommended Preparation: FASH 1 and FASH 20 MATH 40

Credit, degree applicable

Transfer CSU

This course is designed to acquaint the student with the activities and documentation necessary to mass-produce a garment or accessory item. In a semi-simulated design room environment, students design, produce, and advertise a product. Grading, documents, tech packs, production, and promotion principles are emphasized.

FASH 15 - Beginning Fashion Illustration

2 units

1 hour lecture, 3 hours lab

Recommended Preparation: ART 217

Credit, degree applicable

Transfer CSU

This course explores beginning creative sketching and illustration techniques for fashion design and merchandising students. Instruction includes the development of the fashion figure, quick sketches, and technically detailed flat apparel sketches. Students will creatively illustrate fashion design concepts for men, women, and children in relation to correct proportion and scale. Various art supplies will be utilized to create cohesive group presentations targeted at various segments of the apparel industry.

(formerly Fashion 15ab)

FASH 16 - Intermediate Contemporary and Historical Fashion Illustration

2 units

1 hour lecture, 3 hours lab

Prerequisite: FASH 15 with a minimum grade of C or equivalent

Recommended Preparation: ART 217

Credit, degree applicable

Transfer CSU

This course focuses on contemporary and historic illustration. Topics include the study of historical fashion design, how it is properly illustrated, and its application for contemporary apparel design. Historical time periods include the Egyptian, Greek, Roman, Middle Ages, Renaissance, 17th and 18th Centuries, Empire, Romantic, Caroline and Edwardian Period to 1980s. Attention is given to fabric, color, and texture renderings in various mediums.

(formerly Fashion 16ab)

FASH 17 - Decorative Textiles

1 Unit

.50 hours lecture, 1.5 hours lab

Prerequisite: FASH 20 with a minimum grade of C or equivalent experience

Credit, degree applicable

CSU

This course covers decorative techniques applied to fabrics. Techniques include marbling, resisting, block printing, stamping, image transfer, embroidery, beading and quilting.

Note: *Note: Letter grade or Pass/No Pass option*

FASH 18 - Advanced Fashion Illustration Portfolio Techniques

2 units

1 hour lecture, 3 hours lab

Prerequisite: FASH 16 with a minimum grade of C or equivalent

Recommended Preparation: ART 217

Credit, degree applicable

Transfer CSU

This advanced fashion illustration and costume design course covers the development of a professional portfolio for presentation to employers and to qualify for university transfer. Through lecture and lab, advanced research, rendering, and media techniques, fashion design and merchandising skills are emphasized for perfecting portfolio presentations.

FASH 20 - Textiles

3 units

3 hours lecture

Credit, degree applicable

Transfer CSU, UC

This introductory course covers characteristics of textiles for fashion design majors. Students are introduced to: various fibers, yarn types, fabrication, coloring, printing and finishing methods. Selection, use and care of textiles are emphasized.

FASH 23 - Fitting and Alterations

2 units

1 hour lecture, 3 hours lab

Prerequisite: FASH 10 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

This course teaches alterations and repair of Ready-to-Wear (RTW) clothing and alterations of commercial patterns to conform to body contours. Students analyze the figure and adjust patterns and garments for figure variations. Material covered will be valuable to apparel industry patternmakers and home sewers.

FASH 26A - Basic Design and Patternmaking

3 units

2 hours lecture, 3 hours lab

Prerequisite: FASH 10 with a minimum grade of C

Recommended Preparation: MATH 40

Credit, degree applicable

Transfer CSU

This course covers manual flat pattern methods for dresses and separates apparel using the basic sample size for women's and girls' wear.

FASH 26B - Basic Dress Design through Draping Process

3 units

2 hours lecture, 3 hours lab

Prerequisite: FASH 10 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

This course is the study of draping techniques to create original garment designs. The draping process is the development of a garment through fabric manipulation directly on a dress form. To maintain design integrity, this course emphasizes the relationship of the fabric hand, color print and structure so students will be able to solve unfamiliar design problems.

FASH 27 - Fashion Merchandising

3 units

3 hours lecture

Recommended Preparation: ENGL A

Credit, degree applicable

Transfer CSU

This course introduces students to the fashion merchandising industry. The course content consists of an overview of the fashion industry and career opportunities, which include planning, selecting, selling, and promoting fashion merchandise. Also covered are the merchandising and tracking fashion trends.

FASH 28 - Visual Merchandising

2 units

1 hour lecture, 3 hours lab

Recommended Preparation: ENGL A

Credit, degree applicable

Transfer CSU

In this course, students are introduced to the basic concepts, techniques, and planning procedures for the visual approach to selling merchandise. Current methods of visual merchandising are discussed including the use of mannequins, signage, and marketing as well as store planning and layout.

FASH 29 - Computer Pattern Design/Patternmaking

3 units

2 hour lecture, 3 hours lab

Prerequisite: FASH 26A with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

This course covers the application of computer-aided pattern design software. Topics include the drafting and manipulation of basic blocks and garment styles.

Note: Letter grade or pass/no pass option.
(formerly Fashion 29ab)

FASH 31 - History of Costume

3 units

3 hours lecture

Recommended Preparation: ENGL A

Credit, degree applicable

Transfer CSU

This course covers the important periods of costume design, the effects on and relationships to the political, social and economic conditions of the times and how they have influenced life style and culture. Emphasis is placed on both aesthetic and functional aspects of costumes and the importance in the evolution and inspiration of modern dress.

FASH 35 - Applied Color Theory

2 units

1 hour lecture, 3 hours lab

Recommended Preparation: ENGL 84

Credit, degree applicable

Transfer CSU

In this course, students are introduced to the essential theories of color perception and applied problems involving color interaction phenomena, effects, and function that occur in fashion design. Students will use color as a visual language to modify space and shape perception to generate desired effects when applied to fashion.

FASH 41 - Fashion Analysis and Selection

3 units

3 hours lecture

Recommended Preparation: ENGL A

Credit, degree applicable

Transfer CSU

In this course, students are introduced to the societal importance of apparel and personal appearance. Emphasis is placed on social, psychological, cultural and physical clothing needs. Additional topics include elements and principles of design, wardrobe planning, apparel quality and clothing care, fit, and apparel purchasing.

FASH 44 - Fashion Show Production and Promotions

3 units

2 hours lecture, 3 hours lab per week to be arranged

Prerequisite: FASH 10 and FASH 41 with a minimum grade of C in prerequisite

Credit, degree applicable

Transfer CSU

This course is a study of the planning, directing and coordinating of fashion promotions including the El Camino annual fashion show. Promotions, financing, and vendor selection will be considered in relation to event planning and implementation.

(formerly Fashion 42abc)

FASH 95 - Cooperative Work Experience Education

2-4 units

hours to be arranged

Enrollment Limitation: Employment or volunteer work in a position related to the student's major or career goal by the second week of the semester. Completion of or current enrollment in one course from the major.

Credit, degree applicable

Transfer CSU*

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Fashion field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

Note: *Transfer limitations apply. The total units earned for Cooperative Work Experience Education may not exceed 16 units.

(formerly Fashion 95abcd)

FASH 99 - Independent Study

1-3 units

hours to be arranged

Enrollment Limitation: two courses in Fashion with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work

Credit, degree applicable

Transfer CSU*

This course provides special advanced studies in a subject field of Fashion not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Fashion projects (54 hours per unit).

Note: *Transfer limitations apply. For eligibility requirements, go to www.elcamino.edu/admissions/credit.asp

(formerly Fashion 99abc)

FILM 95 - Cooperative Work Experience Education

2-4 units

hours to be arranged

Enrollment Limitation: Employment or volunteer work in a position related to the student's major or career goal by the second week of the semester. Completion of or current enrollment in one course from the major.

Credit, degree applicable

Transfer CSU*

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Film/Video field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

Note: *Transfer limitations apply. The total units earned for Cooperative Work Experience Education may not exceed 16 units. (formerly Film/Video 95abcd)

FILM 99 - Independent Study

1-3 units

hours to be arranged

Enrollment Limitation: two courses in Film/Video with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work

Credit, degree applicable

Transfer CSU*

This course provides special advanced studies in a subject field of Film/Video not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Film/Video projects (54 hours per unit).

Note: *Transfer limitations apply. For eligibility requirements, go to www.elcamino.edu/admissions/credit.asp (formerly Film/Video 99abc)

FILM 100 - Introduction to Electronic Media

3 units

3 hours lecture

Credit, degree applicable

Transfer CSU, UC

This course surveys the history, structure, function, economics, content and evolution of radio, television, film, the internet, and news media, including traditional and mature formats. The social, political, regulatory, ethical and occupational impact of the electronic media are also studied.

FILM 105 - Media Aesthetics

3 units

3 hours lecture

Recommended Preparation: ENGL B

Credit, degree applicable

Transfer CSU, UC

This course introduces students to close analyses of film and television texts and includes 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.

FILM 109 - Introduction to Media Writing

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This course introduces students to writing for film and electronic media. Emphasis will be placed on preparing scripts in proper formats, including fundamental technical, conceptual and stylistic issues related to writing fiction and non-fiction scripts for informational and entertainment purposes in film and electronic media.

FILM 110 - Film Appreciation

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

In this course, students will investigate the origins and aesthetics of cinema including the classic Hollywood narrative film and its alternatives. By analyzing representative films as unique cultural products, the student will be introduced to various methods of interpreting and evaluating motion pictures within their socio-political context.

(formerly Film/Video 1)

FILM 113 - Screenplay Analysis

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

In this introductory course, students will analyze the underlying story structure of motion pictures, short films, and television programs. Through screenings, lectures, and writing exercises, students will study the basic components of an effective, unified script that connects with its intended audience. Special attention will be paid to the classical Hollywood model of storytelling for developing scripts for both fiction and non-fiction productions.

(formerly Film/Video 3)

FILM 114 - Story Development

3 units

3 hours lecture

Prerequisite: ENGL 1A or ENGL 1AH with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course provides students with a framework for developing dramatic stories for movies and television. Prior to writing a screenplay, students will research and develop an original idea for a screen story. Emphasis will be placed on developing main theme, structure, characters, plot outline, and on writing the treatment.

(formerly Film/Video 4)

FILM 121 - Audio Production

3 units

2 hours lecture, 3 hours lab

Credit, degree applicable

Transfer CSU

This course is an introduction to production and postproduction sound for various mediums including motion pictures, television, and new media. Basic techniques common to these mediums will be covered including analog and digital recording, audio editing, sound design, and mixing.

(formerly Film/Video 21)

FILM 122 - Production I

3 units

2 hours lecture, 3 hours lab

Credit, degree applicable

Transfer CSU, UC

This course explores the basic concepts and techniques of professional film/video production. Students will create films and videos using professional single-camera production methods.

(formerly Film/Video 22)

FILM 124 - Production Planning

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This course provides students with the skills needed for effectively planning production projects for various entertainment and corporate industries. Financing, script development, budgeting, scheduling, and marketing will be covered.

(formerly Film/Video 24)

FILM 128 - Television Production

3 units

2 hours lecture, 3 hours lab

Credit, degree applicable

Transfer CSU

This course is a study of production principles and procedures common to all television and media productions from conceptualization to completed project. The emphasis is on scripting, planning, directing, editing, and other skills unique to audio/video media. Budgeting, cost analysis, legal issues, research, and other production situations will also be examined.

(formerly Film/Video 28)

FILM 153 - American Independent Cinema

3 units

3 hours lecture

Recommended Preparation: FILM 110

Credit, degree applicable

Transfer CSU, UC

This course surveys the socio-economic, political, and artistic forces that led to the rise of American Independent Cinema. Emphasis will be placed on studying film makers, such as D.W. Griffith, Roger Corman, Robert Redford, David Lynch, Spike Lee, and Quentin Tarantino, who pioneered producing movies outside of the traditional Hollywood system.

(formerly Film/Video 53)

FILM 154 - Regional Cinemas

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course will survey major films and filmmakers from one or more regions, such as Italy or India, or from a geographic area such as Africa or Latin America. By analyzing representative films as unique cultural products, the student will be introduced to various methods of interpreting and evaluating a particular region's indigenous cinema within its socio-political context. Emphasis is placed on studying films and directors whose stylistic and thematic trends have been affected by significant cultural events. As the content changes each semester, this course is repeatable for credit.

(formerly Film/Video 54)

FILM 232 - Production II

3 units

2 hours lecture, 3 hours lab

Prerequisite: FILM 122 or FILM 128 with a minimum grade of C in prerequisite or equivalent

Credit, degree applicable

Transfer CSU, UC

This course provides the intermediate-level production student with practical, hands-on experience in film/video production, including planning, writing, shooting, and editing. Students will write and produce a variety of individual and group film/video projects.

(formerly Film/Video 32)

FILM 234 - Camera and Lighting

3 units

2 hours lecture, 3 hours lab

Prerequisite: FILM 122 with a minimum grade of C

Credit, degree applicable

Transfer CSU

This is an intermediate-level course in traditional and electronic cinematography that explores lighting design, composition, visual interpretation, and camera operation. Note: Letter grade or pass/no pass option.

(formerly Film/Video 34)

FILM 236 - Editing

3 units

2 hours lecture, 3 hours lab

Credit, degree applicable

Transfer CSU

This is an intermediate-level course that teaches picture and sound editing skills. Advanced editing concepts such as pace, rhythm, and tempo will be explored through screenings, lectures, and student-made projects. Special attention will be paid to the role of digital technologies in film/video postproduction.

Note: Letter grade or pass/no pass option.

(formerly Film/Video 36)

FTEC 1 - Fire Protection Organization

3 units

3 hours lecture

Recommended Preparation: ENGL A

Credit, degree applicable

Transfer CSU

This course provides an introduction to fire protection. Emphasis is placed on career opportunities in fire protection and related fields and the philosophy and history of fire protection. Additional topics include 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; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems; and introduction to fire strategy and tactics.

FTEC 2 - Fire Prevention Technology

3 units

3 hours lecture

Recommended Preparation: FTEC 1 and ENGL A

Credit, degree applicable

Transfer CSU

This course provides fundamental information regarding the history and philosophy of fire prevention; organization and operation of a fire prevention bureau; use of fire codes; identification and correction of fire hazards. Also covered is the relationship of fire prevention with fire safety education, detection and suppression systems.

FTEC 3 - Fundamentals of Personal Fire Safety and Survival

3 units

3 hours lecture

Recommended Preparation: FTEC 1 and eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This course introduces the basic principles and history related to the national firefighter life safety initiatives. Emphasis will be placed on the need for cultural and behavior change throughout emergency services. Focus is placed on assessing fire dangers and handling common fire situations.

FTEC 4 - Fire Company Organization and Management

3 units

3 hours lecture

Recommended Preparation: FTEC 1 and eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This course is designed to review fire department organization and offer instruction in the organization, management and supervision of fire companies. Areas of discussion include the relationship of the company officer to the organizational structure as well as responsibilities related to personnel supervision, evaluation, discipline and training, communication, fire apparatus and equipment, maintenance, fire prevention, incident response and command, strategy, tactics, records and reports.

FTEC 5 - Fire Behavior and Combustion

3 units

3 hours lecture

Recommended Preparation: FTEC 1 and eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This course examines the theory and fundamentals of how and why fires start, spread, and are controlled, as well as an in-depth study of fire chemistry and physics, fire characteristics of materials, extinguishing agents and fire control techniques.

FTEC 6 - Building Construction for Fire Protection

3 units

3 hours lecture

Recommended Preparation: FTEC 1 and eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This course is the study of the components of building construction that relate to fire 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. The development and evolution of building and fire codes will be studied in relationship to past fires in residential, commercial, and industrial occupancies.

FTEC 9 - Fire Apparatus and Equipment

3 units

3 hours lecture

Recommended Preparation: FTEC 1 and ENGL A

Credit, degree applicable

Transfer CSU

This course is a study of fire apparatus design and use, including mobile and fixed apparatus. It includes a review of construction specifications and performance capabilities as well as effective deployment, utilization, and performance of equipment under emergency conditions.

FTEC 10 - Hazardous Materials

3 units

3 hours lecture

Recommended Preparation: FTEC 1 and ENGL 1A

Credit, degree applicable

Transfer CSU

This course is a study of firefighting practices related to hazardous chemicals and their physical properties, uses in industry, and characteristics when involved in spills and fires. It includes basic information regarding health effects and treatment as well as fire department protocols and responsibilities.

FTEC 11 - Arson Detection and Control

3 units

3 hours lecture

Recommended Preparation: FTEC 1 and ENGL A

Credit, degree applicable

Transfer CSU

This course is a study of prevention, detection, and control of arson fires. It includes arson motives, fire investigation, and lawful search, identification, collection, seizure, and preservation of evidence.

FTEC 15 - Fire Academy

15 units

9 hours lecture, 18.5 hours lab

Prerequisite:

1. Fire and Emergency Technology 1 with a minimum grade of C or equivalent
2. Fire and Emergency Technology 3 with a minimum grade of C or equivalent
3. Fire and Emergency Technology 5 with a minimum grade of C or equivalent
4. Fire and Emergency Technology 6 with a minimum grade of C or equivalent
5. Possession of a National Registry Card or possession of a valid Emergency Medical Technician (EMT) license as required by the California State Fire Marshal's Office
6. Pass a Fire Fighter Physical Agility Test (FPAT) or Candidate Physical Agility Test (CPAT) within the last 6 months as required by the California State Fire Marshal's Office
7. Pass a physical examination according to the National Fire Protection Association (NFPA) Standard #1582
8. Pass the El Camino College Fire Physical Qualification Test
9. Possess a valid California driver's license

Credit, degree applicable

This course is designed for students who wish to prepare for entry-level positions as a firefighter and work toward becoming certified as a Fire Fighter 1, as specified by the California State Fire Marshal's Office. Students participate in a 495-hour course of instruction emphasizing basic firefighting skills such as methods of extinguishing fires, principles of ventilation, techniques of physical rescue, building construction, fire apparatus, fire equipment maintenance, and the knowledge of fire behavior.

Note: Students must apply through the Industry and Technology Division Office. Students must pay non-refundable fees for state certifications and state licensing.

FTEC 16 - Fire Fighter 1 Capstone Testing

1.5 units

4.5 hours lab

Recommended Preparation: FTEC 15 with a minimum grade of C

Credit, not degree applicable

This course encompasses the California State Fire Marshal "Capstone Testing" program. Students who have graduated from a California State Fire Marshal certified fire academy are required to pass this course, in order to receive certification as a Fire Fighter 1. Topics covered include self-contained breathing apparatus, ladders, hose, tools and equipment, wildland fire fighting, hazardous materials and general firefighting knowledge. A certificate from the California State Fire Marshal will be issued to students who successfully pass this course according to current State Fire Marshal standards.

Note: Pass/no pass only

FTEC 19 - Fire Service Entrance Preparation

3 units

3 hours lecture

Recommended Preparation: FTEC 1 and ENGL A

Credit, degree applicable

This course will explore all aspects of commonly used hiring procedures in the field of fire service. Fire service diagnostic tests will be used to identify any weakness in fire service entry-level skills. Students will research hiring practices, take practice written examinations, participate in mock oral board examinations, and receive instruction which will enhance their fire technology career opportunities.

FTEC 20 - Fire Protection Equipment and Systems

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This course addresses the features of design and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems, water supply for fire protection and portable fire extinguishers.

FTEC 71 - Vehicle Extrication 1B

1.5 units

1.5 hours lecture

Prerequisite: Successful completion of a California State Fire Marshall certified Fire Academy. Proof of passing the Emergency Medical Technician (EMT) National Registry Examination
Credit, not degree applicable

This course parallels the Hazardous Materials Command Principles for Company Officers course offered by the California Fire Service Training and Education System (CFSTES). The topics include the Incident Command System (ICS), multi-casualty incidents, hazardous materials incidents, wildland fire incidents, environmental concerns and legal issues. The course applies to Fire Officer certification requirements established by the California State Board of Fire Services.

FTEC 72 - Trench Rescue Technician

1.5 units

1.5 hours lecture

Prerequisite: Successful completion of a California State Fire Marshall certified Fire Academy. Proof of passing the Emergency Medical Technician (EMT) National Registry Examination
Credit, not degree applicable

This course parallels Instructional Techniques Part 1 offered by the California Fire Service Training and Education System (CFSTES). It is designed to provide instruction in fire service training methods with emphasis on using occupational analysis, identifying training needs, and training others to perform manipulative skills. The course applies to Fire Officer, Fire Instructor I and Public Education Officer II certification requirements established by the California State Board of Fire Services.

FTEC 73 - Human Resource Management for Company Officers (Company Officer 2A)

2 units

2 hours lecture

Recommended Preparation: FTEC 1 and ENGL A

Credit, degree applicable

This course provides information on the use of human resources to accomplish assignments, evaluating member performance, and integrating health and safety plans, policies, and procedures into daily activities as well as the emergency scene

FTEC 74 - General Administrative Functions for Company Officers (Company Officer 2B)

1 units

1 hours lecture

Recommended Preparation: FTEC 1

Credit, degree applicable

Transfer CSU

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.

FTEC 75 - Fire Inspections and Investigation for Company Officers (Company Officer 2C)

2 units

2 hours lecture

Recommended Preparation: FTEC 1

Credit, degree applicable

Transfer CSU

This course addresses conducting inspections, identifying hazards and addressing violations, performing a fire investigation to determine preliminary cause, and securing the incident scene and preserving evidence.

FTEC 76 - All-Risk Command Operations for Company Officers (Company Officer 2D)

2 units

2 hours lecture

Recommended Preparation: FTEC 1 and ENGL A

Credit, degree applicable

Transfer CSU

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 pre-incident planning, and developing and conducting a post-incident analysis.

FTEC 77 - Wildland Operations for Company Officers (Company Officer 2E)

2 units

2 hours lecture

Recommended Preparation: FTEC 1

Credit, degree applicable

Transfer CSU

This course provides information on evaluating and reporting incident conditions, analyzing 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 an incident action plan, and completing incident records and reports.

FTEC 78 - Instructional Methodology (Instructor I)

2 units

2 hours lecture

Recommended Preparation: FTEC 1 and ENGL A

Credit, degree applicable

Transfer CSU

This course provides the skills and knowledge needed for the entry level professional instructor to perform his or her duties safely, effectively, and competently. The curriculum is based on the most current edition of National Fire Protection Association (NFPA) 1041 Standards for Fire Service Instructor Professional Qualifications. At the end of this course, candidates for Instructor I certification will be able to teach and deliver instruction from a prepared lesson plan utilizing instructional aids and evaluation instruments. The Instructor I will also be able to adapt a lesson plan and complete the reporting requirements to the local jurisdiction.

FTEC 80A - Training Instructor 1A

2 units

2 hours lecture

Recommended Preparation: FTEC 1

Credit, degree applicable

Transfer CSU

This course parallels Instructional Techniques Part 1 offered by the California Fire Service Training and Education System (CFSTES). It is designed to provide instruction in fire service training methods with emphasis on using occupational analysis, identifying training needs, and training others to perform manipulative skills. The course applies to Fire Officer, Fire Instructor I and Public Education Officer II certification requirements established by the California State Board of Fire Services.

FTEC 80B - Training Instructor 1B

2 units

2 hours lecture

Recommended Preparation: FTEC 80A

Credit, degree applicable

Transfer CSU

This course parallels Instructional Techniques Part 2 offered by the California Fire Service Training and Education System (CFSTES). The topics covered include preparing course outlines, establishing levels of instruction, constructing behavioral objectives and lesson plans, instructional aid development, and the fundamentals of testing and evaluation. The course applies to Fire Officer, Fire Instructor I and Public Education Officer II certification requirements established by the California State Board of Fire Services.

FTEC 95 - Cooperative Work Experience Education

2-4 units

hours to be arranged

Enrollment Limitation: Employment or volunteer work in a position related to the student's major or career goal by the second week of the semester. Completion of or current enrollment in one course from the major.

Credit, degree applicable

Transfer CSU*

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Fire and Emergency Technology field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

Note: *Transfer limitations apply. The total units earned for Cooperative Work Experience Education may not exceed 16 units. (formerly Fire and Emergency Technology 95abcd)

FTEC 99 - Independent Study

1-3 units

hours to be arranged

Enrollment Limitation: two courses in Fire and Emergency Technology with a minimum grade of B in each and acknowledgment by instructor with whom the student will work

Credit, degree applicable

Transfer CSU*

This course provides special advanced studies in a subject field of Fire and Emergency Technology not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Fire and Emergency Technology projects (54 hours per unit).

Note: *Transfer limitations apply. For eligibility requirements, go to www.elcamino.edu/admissions/credit.asp (formerly Fire and Emergency Technology 99abc)

FTEC 110B - Fire Inspector 1B

1.5 units

1.5 hour lecture

Recommended Preparation: FTEC 1

Credit, degree applicable

CSU Transfer

This course provides students with a basic knowledge of fire and life safety aspects related to the roles and responsibilities of a Fire Inspector 1, including building construction, occupancy classifications, occupant load, means of egress, hazardous conditions, fire growth potential, fire flow, and emergency planning and preparedness measures. The student who completes this course will be awarded a Certificate from the Office of the California State Fire Marshal.

FTEC 110C - Fire Inspector 1C

2 units

2 hours lecture

Recommended Preparation: FTEC 1

Credit, degree applicable

CSU Transfer

This course provides students with a basic knowledge of field inspection roles and responsibilities of a Fire Inspector 1 including basic plan review, emergency access for an existing system, hazardous materials, and the operational readiness of fixed fire suppression systems, existing fire detection and alarm systems, and portable fire extinguishers. The student who completes this course will be awarded a certificate from the Office of the California State Fire Marshal.

FTEC 113A - Fire Apparatus Driver/Operator-Pumping Apparatus (Driving)

1 unit

1 hour lecture

Prerequisite: Hold a valid Class C driver's license (minimum). State Fire Marshal requirement.

Recommended Preparation: FTEC 1

Credit, degree applicable

CSU Transfer

This course provides information on fire apparatus preventive maintenance and driver/operating. Topics include routine tests, inspections, servicing functions, operate, back, 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 2014 edition of National Fire Protection Association 1002 "Standards for Fire Apparatus Driver/Operator Professional Qualifications." This course fulfills the requirements for a Class C Firefighter Endorsement.

Note: Pass/no pass only

FTEC 113B - Fire Apparatus Driver/Operator-Pumping Apparatus (Pumping)

1 unit

1 hour lecture

Prerequisite:

- Fire Apparatus Driver/Operator 1A (2008 or 2015 version)
- Successfully completed Office of the State Fire Marshal Fire Fighter 1
- Hold a valid Class C Firefighter Endorsed driver's license

Note: These are State Fire Marshal requirements

Recommended Preparation: FTEC 1

Credit, degree applicable

This course provides information on pumping apparatus preventive maintenance and operations. Topics include routine tests, inspections, and servicing functions producing hand, master, and foam fire streams, relay pump operations and supplying water to fire sprinkler and standpipe systems. This course is based on the 2014 edition of National Fire Protection Association 1002 "Standards for Fire Apparatus Driver/Operator Professional Qualifications"

Note: Students must apply through the Industry and Technology Division Office. Pass/no pass only.

FTEC 120 - Emergency Medical Foundations

3 units

3 hours lecture

Credit, not degree applicable

The Emergency Medical Foundations course prepares students for prehospital assessment and care for patients of all ages with a variety of medical conditions and traumatic injuries. Areas of study include an introduction to emergency medical services systems, roles and responsibilities of prehospital care workers, safety principles, anatomy and physiology, medical emergencies, trauma, and emergency scene management.

Note: This course is recommended for any students interested in emergency medicine which includes, but not limited to: EMT's, paramedics, nurses, and doctors. The principles covered throughout the course are universal to the foundation of emergency medicine.

FTEC 130 - Basic Prehospital Care Principles

2 units

3 hours lecture to be arranged (13 week course)

Enrollment Limitation: admission to Paramedical Technician Program

Credit, degree applicable

This course provides an introduction to medical terminology, along with a review of surface anatomy and physiology. The course presents an overview of the human nervous system, cardiovascular system, and respiratory system. Aseptic techniques will be described and demonstrated

FTEC 131 - Field Assessing and Reporting

1.5 units

2 hours lecture, 1 hour lab to be arranged (13 week course)

Enrollment Limitation: admission to Paramedical Technician Program

Credit, degree applicable

This course covers assessment techniques used in a nonhospital/non-clinical setting. The necessity of obtaining complete and accurate vital signs is stressed. Trauma assessment is discussed and demonstrated.

FTEC 132 - Prehospital Care Pharmacology

1.5 units

2 hours lecture, 1 hour lab to be arranged (13 week course)

Enrollment Limitation: admission to Paramedical Technician Program

Credit, degree applicable

This course provides an introduction to the study of drugs and their ongoing nature and effect on living tissue. A study of the various drugs that are available to the prehospital care technician is presented along with medication administration techniques. An introduction to intravenous (IV) therapy and drug therapy is covered.

FTEC 133 - Basic and Advanced Life Support

6.5 units

9 hours lecture to be arranged (13 week course)

Enrollment Limitation: admission to Paramedical Technician Program

Credit, degree applicable

This course provides students with a review of cardiopulmonary resuscitation (CPR) techniques and sophisticated forms of airway management. The course presents an introduction and interpretation of electrocardiogram (EKG) rhythms with the use of an oscilloscope. Drugs used in cardiac arrest situations are discussed. Simulation exercises are conducted throughout the course.

FTEC 134 - Medical Emergencies

4 units

6 hours lecture, 1 hour lab to be arranged (13 week course)

Enrollment Limitation: admission to Paramedical Technician Program

Credit, degree applicable

This course covers a variety of medical emergencies that a paramedic is most likely to encounter. Topics presented include, but are not limited to communicable diseases, chest pain, drug abuse/poisonings, diabetes, neurological complications, and respiratory distress.

FTEC 135 - Traumatic Emergencies

2 units

3 hours lecture to be arranged (13 week course)

Enrollment Limitation: admission to Paramedical Technician Program

Credit, degree applicable

This course covers the causes and treatment of bodily injuries due to trauma. Topics include maxillofacial and soft tissue injuries, burns, head, spinal, chest and abdominal wounds, emergency childbirth and multicase incidents.

FTEC 136 - Special Patient Emergencies

2 units

3 hours lecture to be arranged (13 week course)

Enrollment Limitation: admission to Paramedical Technician Program

Credit, degree applicable

This course focuses on emergencies, which involve unresponsive patients, from pediatric to geriatric, patients, and methods for resuscitating these victims. Discussions include obstetrical and behavioral problems as well as circumstances surrounding paramedic critical incident stress.

FTEC 137 - Emergency Medical Services (EMS)/Legal Aspects/Documentation

2 units

3 hours lecture, 1 hour lab to be arranged (13 week course)

Enrollment Limitation: admission to Paramedical Technician Program

Credit, degree applicable

This course covers the laws and legal authority which govern the scope of practice for the paramedic. Also discussed are documentation techniques, paramedic report writing, and skills competency testing.

FTEC 138 - Paramedic Clinical Internship

3 units

40 hours lab per week to be arranged (4 week course)

Prerequisite: FTEC 130, FTEC 131, FTEC 132, FTEC 133, FTEC 134, FTEC 135, FTEC 136, and FTEC 137 with a minimum grade of C in each prerequisite course

Enrollment Limitation: admission to Paramedical Technician Program

Credit, degree applicable

This course provides the student with an opportunity to apply knowledge and skills learned in the preceding courses to patient care. The emphasis of the course is to increase the student's assessment and diagnostic skills in a clinical setting.

Note: Pass/no pass only.

FTEC 139 - Paramedic Field Internship

8.5 units

60 hours lab per week to be arranged (8 week course)

Prerequisite: FTEC 138 with a minimum grade of C

Enrollment Limitation: admission to Paramedical Technician Program
Credit, degree applicable

This course provides an in-depth opportunity for the student to apply the skills and techniques that are necessary for a paramedic. The student will complete a field internship in a designated mobile intensive care unit under the supervision and evaluation of a certified paramedic or mobile intensive care nurse.

Note: Pass/no pass only.

FTEC 144 - Emergency Medical Technician

6.5 units

5.5 hours lecture, 3 hours lab

Prerequisite: Possession of a current Basic Life Support (BLS) for Healthcare Providers (HCP) certification or BLS for Prehospital Providers (PHP) certification. Must be issued by the American Heart Association or American Red Cross and not expire less than six months from the start date of class.

Recommended Preparation: FTEC 120

Credit, degree applicable

Transfer CSU

Emergency Medical Technicians are professional medical responders that work to help and transport ill and injured patients in various emergency field and clinical settings. Principles that are covered throughout this course include, but are not limited to: leadership, followership, communication, safety, situational awareness, decision making, patient assessment and professionalism. EMT students will be trained to recognize and treat medical illnesses and traumatic injuries through facilitated discussion, skills lab, simulations, scenarios, role-play, tactical decision games and field experience.

Note: Students successfully completing this course with a minimum grade of B will be eligible to take the National Registry of Emergency Medical Technicians (NREMT) written exam.

Students are required to pay for a background check and additional material fees. Proof of immunizations is required to complete hospital and ambulance field work and must include: Measles-Mumps-Rubella (MMR), Tetanus-Diphtheria-Pertussis (Tdap), Varicella, and Tuberculosis results.

This course is repeatable.

FTEC 150 - Fire Specialized Training

2 units

1 hour lecture per week to be arranged, 4 hours lab per week to be arranged

Prerequisite:

1. Successful completion of a California State Fire Marshal certified fire academy.
2. Proof of passing the Emergency Medical Technician (EMT) National Registry Examination.
3. Furnish proof of a current negative Tuberculosis (TB) test. Test must be taken within 12 months and valid during class period.
4. Completion of background investigation. Background investigation to be completed prior to attending the first class session. See the Division Office of Industry and Technology for details.

Credit, degree applicable

Transfer CSU

This course will acquaint the student with current changes in contemporary firefighting techniques. Major topics include fire service appliances, fire chemistry, automatic fire extinguishers and agents. Additional topics include fire prevention and enforcement, arson investigation, public safety, hazardous materials control and enforcement, communication, and emergency medical techniques.

Note: Pass/no pass only. This course is repeatable.

FAID 1 - First Aid, Cardiopulmonary Resuscitation (CPR) and Basic Emergency Care

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL A or ENGL 84

Credit, degree applicable

Transfer CSU, UC

This course follows the American Red Cross Certification Program for First Aid, Basic Life Support (infant, child, adult and two person CPR), and Automated External Defibrillation (AED). The course content includes an emphasis on prevention of injuries, safety education, and skills necessary to sustain life in the event of trauma or sudden illness. Demonstration of skill proficiency and passing written exams with 80 percent or better will qualify students for certification in American Red Cross First Aid, Community CPR, and Professional Rescuer CPR.

Note: Certifying agencies charge an administrative fee for students who pass the exams and wish to receive certification. Obtaining certification documentation from these agencies is optional. Students may be required to obtain proof of certification for other needs or outside agency requirements. El Camino College is not a certifying agency.

FREN 1 - Elementary French I

4 units

5 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course introduces students to speaking, listening, reading and writing linguistically appropriate French. Students are also introduced to the cultural background of the language, including the relationships among cultural practices and perspectives and general aspects of everyday life. Technological support may include videos, DVDs, audio CDs, and internet access to publishers' websites for tutoring and other support.

Note: This course is comparable to two years of high school French.

FREN 2 - Elementary French II

4 units

5 hours lecture

Prerequisite: FREN 1 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC

This course, taught within the context of French culture, is a continuation of the study of elementary French with an emphasis on listening, speaking, reading and writing. Students improve their pronunciation and speaking skills along with their understanding of spoken French. Computer programs and audio and video tapes are available to reinforce the language skills acquired in the classroom.

Note: The prerequisite for this course is comparable to two years of high school French. This course parallels French 150, USC.

FREN 3 - Intermediate French I

4 units

5 hours lecture

Prerequisite: FREN 2 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC

This intermediate course, taught within the context of French culture, emphasizes the study of the essentials of French grammar and the fundamentals of formal French composition. Through oral and written practice, students expand their French vocabulary and use of idiomatic expressions. Students read francophone writings.

Note: The prerequisite for this course is comparable to three years of high school French.

FREN 4 - Intermediate French II

4 units

5 hours lecture

Prerequisite: FREN 3 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC

This course, taught within the context of French culture, is a continuation of the study of essential French grammar and formal composition. Through oral and written practice, students further expand their French vocabulary and use of idiomatic expressions. Students read francophone writings and participate in daily conversations.

Note: The prerequisite for this course is comparable to four years of high school French.

FREN 5 - Advanced French I

3 units

3 hours lecture

Prerequisite: FREN 4 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC

This advanced course, taught within the context of French culture, is a survey of literature written by francophone writers. Students read and summarize the works of representative francophone writers to acquire fluency in the language. Written French, with an emphasis on vocabulary building and functional grammar, is also included.

FREN 6 - Advanced French II

3 units

3 hours lecture

Prerequisite: FREN 5 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC

This advanced course, taught within the context of French culture, introduces students to French literary criticism. Students learn how to write critically about the works of representative francophone writers to acquire fluency in the language and to improve their explication de text skills. Written French, with an emphasis on vocabulary building and functional grammar, is also included.

FREN 21 - Beginning Conversational French

2 units

2 hours lecture

Prerequisite: FREN 1 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

This course is designed to help students develop competency in French oral expression, oral comprehension, pronunciation, and conversational strategies.

(formerly French 21ab)

FREN 22 - Intermediate Conversational French

2 units

2 hours lecture

Prerequisite: FREN 2 and FREN 21 with a minimum grade of C in prerequisite or equivalent

Credit, degree applicable

Transfer CSU, UC

This course is designed for the intermediate student to develop French language fluency in oral expression, increase oral comprehension, and improve pronunciation. Conversational topics are based upon the daily experiences and cultural life of the ethnic areas involved with the French language.

(formerly French 22ab)

FREN 99 - Independent Study

1-3 units

hours to be arranged

Enrollment Limitation: two French courses with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work

Credit, degree applicable

Transfer CSU*

This course provides special advanced studies in a subject field of French education not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned French education projects (54 hours per unit).

Note: ***Transfer limitations apply. For eligibility requirements, go to www.elcamino.edu/admissions/credit.asp (formerly French 99abc)

GEOG 1 - Physical Geography

3 units

3 hours lecture

Recommended Preparation: ENGL 84

Credit, degree applicable

Transfer CSU, UC

This course describes and explains the physical elements of geography. The topics include maps, earth-sun relationships, elements of weather and climate, vegetation patterns, soil types, plate tectonics, volcanism, tectonic activity, and related landforms, weathering and mass wasting, and the landforms created by running water, glaciers, waves, and wind.

GEOG 2 - Cultural Geography

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course surveys the geographic distribution and interrelationships of cultural elements such as population, agriculture, industry, cities, religion, language, customs, and territorial organization.

GEOG 5 - World Regional Geography

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course surveys the major countries and regions of the world, examining their environments, people, cities, resources, history, economies, and special problems.

GEOG 5H - Honors World Regional Geography

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A or ENGL 1AH

Credit, degree applicable

Transfer CSU

This honors course, intended for students in the Honors Transfer Program, surveys the major countries and regions of the world, studying their environments, people, cities, resources, history, economies, and special assets and problems. This course is enriched through extensive research and writing assignments.

Note: Students may take either GEOG 5 or Geography 5H. Duplicate credit will not be awarded for GEOG 5 and Geography 5H.

GEOG 6 - Physical Geography Laboratory

1 unit

3 hours lab

Prerequisite: GEOG 1 with a minimum grade of C or concurrent enrollment

Credit, degree applicable

Transfer CSU, UC

This course consists of laboratory exercises using the geographic grid and world time, earth-sun relationships, atmospheric processes and weather maps, climate classification, natural vegetation, and interpretation of land forms shown on topographic maps and aerial photographs.

GEOG 7 - Geography of California

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course is a systematic study of California's unique and diverse physical environments and associated landforms, climates, and ecological communities. This course presents an overview of human settlement patterns, economic activities, and cultural aspects, with an emphasis on physical environment-human occupancy relationships.

GEOG 8 - Introduction to Geographic Information Systems

4 units

3 hours lecture, 3 hours lab

Recommended Preparation: CIS 13 or basic computer skills

Credit, degree applicable

Transfer CSU, UC

This computer-based course provides an introduction to the fundamentals of automated mapping and Geographic Information Systems (GIS) software. Laboratory work includes experience in the use of map scales, working with spatial data and metadata, creating data with Global Positioning Systems (GPS) and geocoding, map features, map overlays, creation of charts and graphs, basic spatial analysis techniques, and the presentation of data in map layouts.

GEOG 9 - Weather and Climate

3 units

3 hours lecture

Recommended Preparation: ENGL 82

Credit, degree applicable

Transfer CSU, UC

This course is a survey of the causes and regional distribution of the Earth's weather and climate. The content includes the atmosphere, cause of seasons, air temperature, air pressure and wind, clouds and precipitation, and storms. Use of weather instruments and weather data interpretation are also covered.

GEOG 20 - Geography Field Studies

1 unit

0.5 hour lecture, 1.5 hours lab to be arranged

Recommended Preparation: ENGL A

Credit, degree applicable

Transfer CSU

This course focuses on the physical, cultural, urban, and economic elements of geographic regions. Field study is usually conducted over a four day period.

Note: Students pay fees for camping and meals.
(formerly Geography 20abcd)

GEOG 99 - Independent Study

1-3 units

hours to be arranged

Enrollment Limitation: two courses in Geography with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work

Credit, degree applicable

Transfer CSU*

This course provides special advanced studies in a subject field of Geography not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Geography projects (54 hours per unit).

Note: *Transfer limitations apply. For eligibility requirements, go to www.elcamino.edu/admissions/credit.asp
(formerly Geography 99abc)

GEOL 1 - Physical Geology

3 units

3 hours lecture

Recommended Preparation: ENGL 84

Credit, degree applicable

Transfer CSU, UC

This course provides an introduction to geology, including the scientific method and the history of geology. It examines the materials, structures, and processes that compose and shape the earth. It includes a survey of minerals, rocks, and soils a study of plate tectonics and the forces that create volcanoes, earthquakes, and mountains and a study of surface features due to weathering and erosion, streams, mass wasting, ground water, glaciers, wind, desert processes, and ocean waves. The course examines concepts of geologic time, relative and absolute age dating, and fossils. The course also investigates renewable and non-renewable resources as well as mining provinces that produce metals important for industry and technology.

Note: 1 unit of laboratory science credit will be granted with concurrent or subsequent enrollment in a geology laboratory course.

GEOL 2 - History of Planet Earth

3 units

3 hours lecture

Recommended Preparation: GEOG 1 and eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course is a study of the history of the Earth since the time of its formation to the present day. It integrates plate tectonics into a detailed investigation of the dynamics of the Earth's geologic forces and their effect on the atmospheric, oceanic, and biologic realms. The effect of extraterrestrial events such as asteroid impacts that have shaped our habitable world are also covered.

Note: 4 units of laboratory science credit will be granted with concurrent or subsequent enrollment in GEOL 4 or GEOL 30 or GEOL 32.

GEOL 3 - Physical Geology Laboratory

1 unit

3 hours lab

Prerequisite: GEOL 1 with a minimum grade of C or concurrent enrollment

Credit, degree applicable

Transfer CSU, UC

This course is a laboratory study of geologic exercises and the use of topographic maps. Laboratory exercises will include identification of rocks and minerals, map exercises, structure problems, field studies and recognition of land forms created by various processes working on and in the earth.

GEOL 4 - History of Planet Earth Laboratory

1 unit

3 hours lab

Prerequisite: GEOL 2 with a minimum grade of C or concurrent enrollment

Credit, degree applicable

Transfer CSU, UC

This course utilizes laboratory exercises and field study to apply geologic principles in identification of minerals, igneous, metamorphic, and sedimentary rocks and fossils and their use in interpreting earth history, age relationships, and paleogeography of selected regions.

GEOL 6 - Earth Science in Education

4 units

3 hours lecture, 3 hours lab

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This course is a broad-based introductory study of earth science for future educators and will include teaching techniques to engage students in science. The topics covered are part of the California science standards and are designed to introduce geology, oceanography, meteorology, and solar system astronomy. It includes the study of earth materials, geologic history, ocean basins and coastlines, weather and climate, pollution and earth resources, planetary geology, and the scientific method. The laboratory component includes study of rocks, maps, scientific instruments, earthquakes, and local geologic features.

Note: GEOG 6 is not designed for geology or earth science majors.

GEOL 7 - Environmental Science I

3 units

3 hours lecture

Recommended Preparation: ENGL 84

Credit, degree applicable

Transfer CSU

This course is a multidisciplinary introduction to environmental and natural resource issues, with an emphasis on how they can be understood in terms of physics, chemistry, and biology. This course examines human population growth through history, resources, pollution, and sustainability, and relates them to how humans use and affect the hydrosphere, atmosphere, lithosphere, and biosphere.

GEOL 15 - Natural Disasters

3 units

3 hours lecture

Recommended Preparation: ENGL 82

Credit, degree applicable

Transfer CSU, UC

This course presents a study of natural hazards such as earthquakes, volcanism, hurricanes, landslides and floods and how we can prepare for and possibly mitigate these phenomena in order to lessen their impact on society. In addition, this course will address global climate change and associated earth science processes, as well as the misuse and pollution of vital natural resources such as freshwater.

GEOL 30 - Geology Laboratory of Death Valley

1 unit

3 hours lab per week to be arranged

Prerequisite: GEOL 1 with a minimum grade of C or concurrent enrollment

Recommended Preparation: ENGL 84

Credit, degree applicable

Transfer CSU, UC*

This course is a field and laboratory study of the geologic history, rock types, and structural and geomorphic features of the Death Valley region, with special emphasis on seismic activity and desert processes.

Note: Credit may be earned in Geology 30, GEOL 32, GEOL 34, and GEOL 36; however, only one course will be UC transferable.

Note: Some labs will be held in the field on weekends at arranged times. UC does not accept Geology 30, GEOL 32, GEOL 34, or GEOL 36 for the Physical Science laboratory requirement.

GEOL 32 - Geology Laboratory of Owens Valley and Sierra Nevada

1 unit

3 hours lab per week to be arranged

Prerequisite: GEOL 1 with a minimum grade of C or concurrent enrollment

Recommended Preparation: ENGL 84

Credit, degree applicable

Transfer CSU, UC*

This course is a field and laboratory study of the geologic history, rock types, and structural and geomorphic features of the Sierra Nevada and Owens Valley with special emphasis on volcanic and glacial processes.

Note: UC does not accept GEOL 30, 32, GEOL 34, or GEOL 36 for the Physical Science laboratory requirement.

GEOL 34 - Geology Laboratory of Southeastern California

1 unit

3 hours lab per week to be arranged

Prerequisite: GEOL 1 with a minimum grade of C or concurrent enrollment

Recommended Preparation: ENGL 84

Credit, degree applicable

Transfer CSU, UC*

This course is a field and laboratory study of the fault history, rock types, and structural and landform features of the deserts of Southeastern California with a focus on volcanic processes and desert landforms in the Mojave Desert region and Anza-Borrego regions.

GEOL 36 - Geology Laboratory of Coastal California

1 unit

3 hours lab per week to be arranged

Prerequisite: GEOL 1 with a minimum grade of C or concurrent enrollment

Recommended Preparation: ENGL 84

Credit, degree applicable

Transfer CSU, UC*

This course is a field and laboratory study of the geologic history, rock types, structural and geomorphic features and mountain building processes along the central and southern California coast with special emphasis on the geologic history of the Salinian Block, the subsequent impact of the San Andreas Fault, and coastal erosional processes.

Note: Credit may be earned in GEOL 30, GEOL 32, GEOL 34, and Geology 36; however, only one course will be UC transferable.

Note: Some labs will be held in the field on weekends at arranged times. UC does not accept GEOL 30, GEOL 32, GEOL 34, or 36 for the Physical Science laboratory requirement.

GEOL 99 - Independent Study

1-3 units

hours to be arranged

Enrollment Limitation: two earth sciences courses with a minimum grade of B in each and acknowledgment by the instructor with whom student will work

Credit, degree applicable

Transfer CSU*

This course provides special advanced studies in a subject field of Earth Sciences not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Earth Science projects (54 hours per unit).

Note: *Transfer limitations apply. For eligibility requirements, go to www.elcamino.edu/admissions/credit.asp (formerly Geology 99abc)

GERM 1 - Elementary German I

4 units

5 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course introduces students to the development of skills for language acquisition in speaking, listening, reading, and writing linguistically appropriate German. Students are also introduced to the cultural background of the language, including relationships among cultural practices and perspectives and the general aspects of everyday life. Technological support includes videos, DVDs, audio CDs, and internet access to publishers' websites for tutoring and other support.

Note: The course is comparable to two years of high school German.

GERM 2 - Elementary German II

4 units

5 hours lecture

Prerequisite: GERM 1 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC

This course, taught within the context of German culture, is a continuation of the study of elementary German with an emphasis on listening, speaking, reading and writing. Students improve their pronunciation and speaking skills along with their understanding of spoken German. Technology is available to reinforce the language skills acquired in the classroom.

Note: The prerequisite for this course is comparable to two years of high school German.

GERM 3 - Intermediate German I

4 units

5 hours lecture

Prerequisite: GERM 2 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

This intermediate course, taught within the context of German culture, emphasizes the study of the essentials of German grammar and the fundamentals of formal German composition. Through oral and written practice, students expand their German vocabulary and use of idiomatic expressions. Students read materials of representative German authors in their original language.

Note: The prerequisite for this course is comparable to three years of high school German.

HIST 101 - United States History to 1877

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC*

This course is a chronological survey of American history from the first Americans to 1877, focusing on American social, intellectual, political, economic, and diplomatic institutions. Major topics in the course include colonization, slavery, the American Revolution, Native Americans, the Civil War and Reconstruction.

Note: The maximum UC credit allowed for students completing History 101 and HIST 102 and HIST 110 and HIST 111 and/or HIST 105 and HIST 106 is one series.

Students may take either History 101 or HIST 101H. Duplicate credit will not be awarded.

HIST 101H - Honors United States History to 1877

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This honors course, intended for students in the Honors Transfer Program, is a chronological survey of American social, intellectual, political, economic, and diplomatic institutions. Major topics in the course include colonization, slavery, the American Revolution, Native Americans, the Civil War and Reconstruction. This course is enriched through extensive, rigorous reading, writing, and research assignments.

Note: Students may take either HIST 101 or History 101H. Duplicate credit will not be awarded.

HIST 102 - United States History from 1877 to the Present

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC*

This course is a chronological survey of American history from 1877 to the present, focusing on American social, intellectual, political, economic, and diplomatic institutions. Major topics include culture, ethnic and racial diversity and the role of the United States within the context of world history.

Note: The maximum UC credit allowed for students completing HIST 101 and 102 and HIST 110 and HIST 111 and/or HIST 105 and HIST 106 is one series. Students may take History 102 or HIST 102H. Duplicate credit will not be awarded.

HIST 102H - Honors United States History from 1877 to the Present

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This honors course, intended for students in the Honors Transfer Program, is a chronological survey of American history from 1877 to the present, focusing on American social, intellectual, political, economic, and diplomatic institutions. Major topics include culture, ethnic and racial diversity, and the role of the United States with the context of world history. This course is enriched through extensive, rigorous reading, writing, and research assignments.

Note: Students may take either HIST 102 or History 102H. Duplicate credit will not be awarded.

HIST 105 - Women and American History from the Colonial Era to 1877

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC*

This course is a chronological survey of the history of the United States to 1877 with special emphasis on the contributions of women to colonial society and the nation. The impact of social, political, economic and cultural forces on women's lives will also be examined.

Note: The maximum UC credit allowed for students completing History 105 and HIST 106 and HIST 101 and HIST 102 and/or HIST 110 and HIST 111 is one series.

HIST 106 - Women and American History from 1877 to the Present

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC*

This course is a chronological survey of the history of the United States from 1877 to the present with special emphasis on the contributions of women to the evolving modern nation. The impact of social, political, economic and cultural forces on women's lives will also be examined.

Note: The maximum UC credit allowed for students completing HIST 105 and 106 and HIST 101 and HIST 102 and/or HIST 110 and HIST 111 is one series.

HIST 108 - United States History: The American Indian Experience

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course is a survey of the history of the United States with an emphasis on native peoples of North America. Topics include early American Indian societies, the impact of European contact, trade, and colonization as well as the impact of United States political, economic, and social policies on Native Americans. Emphasis is placed on the attempts of American Indians to protect their sovereignty and revitalize their societies.

Note: This course meets the criteria of the CSU graduation requirement for United States History, Constitution, and American Ideals.

HIST 110 - The African American in the United States to 1877

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC*

This course is a survey of the United States to 1877 with particular emphasis on the role of African Americans in shaping American society. The contributions of African Americans to the economic, political, social, and cultural development of the nation will be examined.

Note: This course meets the criteria of the CSU graduation requirement for United States History, Constitution, and American Ideals. The maximum UC credit allowed for students completing History 110 and HIST 111 and HIST 101 and HIST 102 and/or HIST 105 and HIST 106 is one series.

HIST 111 - The African American in the United States from 1877 to the Present

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC*

This course is a survey of the history of the United States from 1877 to the present with particular emphasis on the role of African Americans in shaping American society. The contributions of African Americans to the American society as a whole will also be examined.

Note: This course meets the criteria of the CSU graduation requirement for United States History, Constitution, and American Ideals. The maximum UC credit allowed for students completing HIST 110 and 111 and HIST 101 and HIST 102 and/or HIST 105 and HIST 106 is one series.

HIST 112 - History of the Chicano in the United States

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course surveys United States history from the Chicano perspective and covers historical periods from the initial contact between European and indigenous North American societies through colonial, early national, and contemporary American historical periods. Emphasis is placed on this group's contributions to the development of the United States. Factors that have shaped the formation of Mexican American society within the context of United States history will also be analyzed.

HIST 114 - History of the Asian American in the United States

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This course surveys Asian American history in the United States from 1848 to the present, focusing on the historical interaction of diverse Asian American groups with American politics, culture, society and the economy. Unique Asian American communities and the historical factors that have formed and shaped them will also be examined.

HIST 122 - United States Social History: Cultural Pluralism in America

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course surveys the role and contributions of ethnic groups and racial minorities to United States history. Emphasis is placed on these groups' cultural interaction with the American way of life from colonial times to the present. Focus will also be given to the ways that race and ethnicity have shaped personal lives, communities, the nation, and international relations.

HIST 122H - Honors United States Social History: Cultural Pluralism in America

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This honors course, intended for students in the Honors Transfer Program, surveys the role and contributions of ethnic groups and racial minorities to United States history. Emphasis is placed on these groups' cultural interaction with the American way of life from colonial times to the present. Focus will also be given to the ways that race and ethnicity have shaped personal lives, communities, the nation, and international relations.

Note: Students may take either HIST 122 or History 122H. Duplicate credit will not be awarded.

HIST 128 - History of California

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course is a survey of the history of California with an emphasis on the geographical, political, socio-economic and cultural development of the state. The role of ethnic minorities and women from pre-European times to the present will also be discussed.

HIST 129 - History of Los Angeles

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course surveys the political, social, and economic history of Los Angeles from its earliest settlement by Native Americans to the present. Topics include environmental issues, urban development, race and ethnicity, the entertainment industry, and the media's portrayal of Los Angeles. Special emphasis is given to the expanding role of Los Angeles as a global city that is a destination for diverse immigrant populations and a center of international commerce.

HIST 140 - History of Early Civilizations

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course is a survey of the political, economic, social, and cultural development of World Civilizations from the origins of these complex cultures in the Neolithic era to the emergence of the West in the fifteenth century. Topics include the early civilizations of the Near East, Egypt, India, China, the Americas, Greece, and Rome.

HIST 141 - History of Modern Civilizations

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course is a survey of the political, economic, social, and cultural development of world civilizations from the rise of the West in the mid-fifteenth century to the present day. Topics include the European voyages of exploration and expansion, Africa and the transatlantic slave trade, Protestant and Catholic Reformations, the Islamic empires, China and Japan in the age of global expansion, French and industrial revolutions, World War I and II, the Cold War, and globalization.

Note: HIST 140 is not a prerequisite.

HIST 152 - History of Latin America through Independence

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course surveys the political, economic, social and cultural development of Latin America from the pre- European contact to the achievement of independence in the early 19th century. Topics include the Native American world before European conquest, consequences of contact between Native Americans, Europeans and Africans, the formation of the colonial order, and the move toward independence from Spanish and Portuguese colonial rule.

HIST 154 - A History of Mexico

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer, CSU, UC

This course surveys the political, social, cultural, and economic history of Mexico from Pre-Columbian times to the present. Discussion of major epochs of Mexican history will focus on the influence of various cultural groups in shaping modern Mexico.

HORT 41 - General Horticulture

3 units

3 hours lecture

Recommended Preparation: ENGL 82

Credit, degree applicable

Transfer CSU

This course will provide a foundation for the care and culture of plants with an emphasis on landscape and nursery management. Topics include biomes, plant groups, soil preparation and plant selection, turf grass selection, installation and care, landscape design, nursery management, plant propagation, integrated pest management, and basic botany and physiology. Career opportunities in horticulture will also be discussed.

HORT 42 - Plant Propagation

3 units

2 hours lecture, 3 hours lab

Recommended Preparation: ENGL 82

Credit, degree applicable

Transfer CSU

Plant reproduction techniques will be studied and practiced with an emphasis on asexual (vegetative) propagation methods such as grafting, budding, layering, cuttings, and tissue culture. Sexual propagation (flower/seed), preparation and use of growing mediums, and operations of greenhouse and shade house structures will also be covered.

HORT 44 - Ecology of Edible, Medicinal and Poisonous Plants

3 units

2 hours lecture, 3 hours lab per week to be arranged

Recommended Preparation: ENGL 82

Credit, degree applicable

Transfer CSU

In this course, students will develop an awareness and appreciation of edible, medicinal and poisonous plants and their effect on humans over the centuries. Students will survey ornamental and native plant communities with emphasis on flowering plants, ecology, economic uses, and identification. Students will perform lab work primarily in the field. Field lab sites will be in the chaparral, forest, and desert.

HORT 46 - Pest Control

3 units

3 hours lecture

Recommended Preparation: ENGL 82 and MATH 40

Credit, degree applicable

Transfer CSU

This course emphasizes the concepts of landscape and pest management. Identification and control of potential pests and diseases, and their habits, hosts, and seasonal history will be studied. Chemical, biological and integrated pest management, as well as the laws and regulations affecting pest control, will be discussed.

HORT 53 - Soils and Fertilizers

3 units

2 hours lecture, 3 hours lab

Recommended Preparation: ENGL 82 and MATH 40

Credit, degree applicable

Transfer CSU

This course examines the origin, formation, structure, and composition of soils and the elements of plant nutrition. Soil analysis and methods of determining proper amounts of fertilizer and amendments will be explored. The effects of different fertilizers and their application will also be discussed.

HORT 54 - Landscape Design

3 units

3 hours lecture

Recommended Preparation: ENGL 82 and HORT 55 or HORT 56

Credit, degree applicable

Transfer CSU

This course introduces the principles of landscape design and basic drafting techniques to guide the student through the process of creating formal drawings for residences. Selection and placement of plant materials according to texture, color, mass, and cultural requirements for the intended landscape use will be explored.

HORT 55 - Plant Identification - Trees

3 units

3 hours lecture

Recommended Preparation: ENGL 84

Credit, degree applicable

Transfer CSU, UC

In this course, students will identify approximately 160 trees commonly used in Southern California landscapes. The landscape uses, growth habits, and cultural requirements, as well as the morphological characteristics, of these trees will be studied.

HORT 56 - Plant Identification - Shrubs, Vines, and Groundcovers

3 units

3 hours lecture

Recommended Preparation: ENGL 84

Credit, degree applicable

Transfer CSU, UC

In this course, students will identify approximately 160 shrubs, vines, and groundcovers commonly used in Southern California landscapes. The landscape uses, growth habits, and cultural requirements, as well as the morphological characteristics, of these plants will be studied.

HORT 60 - Basic Landscape Irrigation

3 units

2 hours lecture 3 hours lab

Recommended Preparation: MATH 12

Credit, degree applicable

Transfer CSU

This course introduces the basics of residential and small commercial landscape irrigation and determining the water demand and the water availability of a landscape site. Selection of sprinklers, proper sizing of pipe, and selection of irrigation controllers as well as typical irrigation materials and assembly techniques will be explored. Low volume irrigation systems will also be discussed.

HORT 99 - Independent Study

1-3 units

hours to be arranged

Enrollment Limitation: two courses in Horticulture with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work

Credit, degree applicable

Transfer CSU*

This course provides special advanced studies in a subject field of Horticulture not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Environmental Horticulture projects (54 hours per unit).

Note: *Transfer limitations apply. For eligibility requirements, go to www.elcamino.edu/admissions/credit.asp (formerly Horticulture 99abc)

HDEV 101 - Orientation to College and Educational Planning

1 unit

1 hour lecture

Recommended Preparation: ENGL 84 or ESL 52B and ENGL A or ESL 53C

Credit, degree applicable

Transfer CSU

This course provides students with the information, skills, and resources necessary for successful educational experiences. Students will become aware of their responsibilities as students in a diverse college setting, develop an understanding of their individual learning styles, create realistic and obtainable educational and career goals, develop skills in managing time to achieve goals, and learn how to create a support network using college resources and services.

(formerly Human Development 8)

HDEV 105 - Career and Life Planning

1 unit

1 hour lecture

Recommended Preparation: ENGL 84 or ESL 52B and ENGL A or ESL 53C

Credit, degree applicable

Transfer CSU

This course provides an introduction to career and life planning, including an exploration of core values, skills, personality traits, life stages and experiences. Students will develop a career and life plan by applying career planning techniques and decision-making strategies. Emphasis will be placed on awareness of psychological, sociological, and physiological factors related to career and life satisfaction.

(formerly Human Development 5)

HDEV 107 - Navigating the Transfer Process

1 unit

1 hour lecture

Recommended Preparation: ENGL 84 or ESL 52B and ENGL A or ESL 53C

Credit, degree applicable

Transfer CSU

This course introduces students to the process of transferring to a university. Students will be provided with information necessary to evaluate educational and career goals, compare universities, and review university admissions and major preparation requirements. Emphasis will be placed on the development of educational plans, financial aid opportunities, and available programs and services at universities.

(formerly Human Development 20)

HDEV 110 - Strategies for Creating Success in College and in Life

3 units

3 hours lecture

Recommended Preparation: ENGL 84 or ESL 52B and ENGL A or ESL 53C

Credit, degree applicable

Transfer CSU, UC

This course provides an exploration of cognitive, psychological, social and physical factors influencing success in college and in life. Topics include personal responsibility, critical thinking, motivation, self-efficacy, self-awareness, lifelong learning, self-management, health and wellness, interpersonal communication in a diverse world, and educational planning.

(formerly Human Development 10)

HDEV 115 - Career Development Across the Lifespan

3 units

3 hours lecture

Recommended Preparation: ENGL 84 or ESL 52B and ENGL A or ESL 53C

Credit, degree applicable

Transfer CSU

This course offers a comprehensive approach to career development across the lifespan. Theories of career and life development provide a framework for understanding vocational choice, work satisfaction, and career transition. Psychological and sociological factors influencing education, career and personal decision-making, career assessment tools for identifying college majors and careers, as well as the knowledge, skills and personal qualities necessary for success in a diverse workplace will be discussed. The course also reviews changing global environments, labor market trends, career research, and job search strategies.

HUMA 1 - An Introduction to the Humanities

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course is an introduction to the humanities through an historical, descriptive, interpretive, and critical study of film, drama, music, literature, painting, sculpture, and architecture.

ITAL 1 - Elementary Italian I

4 units

5 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

Italian 1 is designed primarily for non-native speakers of Italian (native speakers of Italian are required to enroll in a higher level of Italian). This course focuses on communicative elements of the Italian language at a beginning level. Emphasis is placed on listening, speaking, reading, and writing in Italian. Technological aids may include videos, DVDs, and internet access to publishers' websites for tutoring and other support.

Note: This course is comparable to two years of high school Italian.

ITAL 2 - Elementary Italian II

4 units

5 hours lecture

Prerequisite: ITAL 1 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC

This course, taught within the context of Italian culture, is a continuation of the study of elementary Italian with an emphasis on listening, speaking, reading, and writing. Students improve their pronunciation and speaking skills along with their understanding of spoken Italian. Technological support to reinforce the language skills acquired in the classroom may be offered in the form of videos, audio tapes, and internet resources.

Note: The prerequisite for this course is comparable to two years of high school Italian.

ITAL 21 - Beginning Conversational Italian

2 units

2 hours lecture

Prerequisite: ITAL 1 with a minimum grade of C or equivalent

Credit, degree applicable

This course is designed to help students develop competency in Italian oral expression, oral comprehension, pronunciation, and conversational strategies.

(formerly Italian 21ab)

ITAL 22 - Intermediate Conversational Italian

2 units

2 hours lecture

Prerequisite: ITAL 2 and ITAL 21 with a minimum grade of C in prerequisite or equivalent

Credit, degree applicable

Transfer CSU, UC

This course is designed for the intermediate student to develop Italian language fluency in oral expression, increase oral comprehension, and improve pronunciation. Conversational topics are based upon the daily experiences and cultural life of the areas where Italian is spoken.

(formerly Italian 22ab)

ITAL 24 - Introduction to Italian Culture

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course provides an introduction to the cultural aspects of the Italian language through a study of geography, social institutions, literature, art, architecture, and music. Topics include a comparison of Italian and other Western languages and cultures. This course is taught in English.

JAPA 1 - Elementary Japanese I

4 units

5 hours lecture

Recommended Preparation: eligibility for ENGL A

Credit, degree applicable

Transfer CSU, UC

This course, taught within the context of Japanese culture, introduces students to the development of skills for language acquisition in speaking, listening, reading, and writing of modern Japanese. Students also are introduced to the cultural background of the language.

Note: This course is comparable to two years of high school Japanese.

JAPA 2 - Elementary Japanese II

4 units

5 hours lecture

Prerequisite: JAPA 1 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC

This course, taught within the context of Japanese culture, is a continuation of the study of elementary Japanese through intensive training on listening, speaking, reading, and writing. Students improve their speaking skills and extend their study of the basic grammar and Kanji characters.

Note: The prerequisite for this course is comparable to two years of high school Japanese.

JAPA 3 - Intermediate Japanese I

4 units

5 hours lecture

Prerequisite: JAPA 2 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC

In this first intermediate course, taught within the context of Japanese culture, students develop their functional communication skills in Japanese through listening, speaking, reading, and writing practice. Students expand their knowledge of the Japanese language and culture. Students read material drawn from daily Japanese life.

Note: The prerequisite for this course is comparable to three years of high school Japanese.

JAPA 4 - Intermediate Japanese II

4 units

5 hours lecture

Prerequisite: JAPA 3 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC

In this second intermediate course, taught within the context of Japanese culture, students further develop their functional communication skills in Japanese through listening, speaking, reading, and writing practice. Students expand their Japanese proficiency and cultural knowledge by comparing and contrasting the Japanese language and culture to their own. Students read material drawn from daily Japanese life.

Note: The prerequisite for this course is comparable to four years of high school Japanese.

JAPA 21 - Beginning Conversational Japanese

2 units

2 hours lecture

Prerequisite: JAPA 1 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

Students develop competency in Japanese oral expression, oral comprehension, and conversational strategies. Students learn how to converse in various situations, such as business, travel, and dining within the context of Japanese culture.

(formerly Japanese 21ab)

JAPA 22 - Intermediate Conversational Japanese

2 units

2 hours lecture

Prerequisite: JAPA 2 and JAPA 21 with a minimum grade of C in prerequisite or equivalent

Credit, degree applicable

Transfer CSU, UC

This course is designed for the intermediate student to develop Japanese language fluency in oral expression, increase oral comprehension, and improve pronunciation. Conversational topics are based upon the daily experiences and cultural life of native Japanese speakers.

(formerly Japanese 22ab)

JAPA 25 - Cultural Aspects of the Japanese Language

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course provides a study of the cultural aspects of the Japanese language, including the origin of the Japanese people and their language, art, religion, philosophy, and geography. The anthropological and sociological characteristics relating to the language and a comparison of Japanese and Western languages and cultures are also covered. This course is taught in English.

JAPA 99 - Independent Study

1-3 units

hours to be arranged

Enrollment Limitation: two courses in Japanese with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work

Credit, degree applicable

Transfer CSU*

This course provides special advanced studies in a subject field of Japanese education not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Japanese projects (54 hours per unit).

Note: *Transfer limitations apply. For eligibility requirements, go to www.elcamino.edu/admissions/credit.asp (formerly Japanese 99abc)

JOUR 1 - News Writing and Reporting

3 units

3 hours lecture

Prerequisite: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course provides instruction in writing and reporting for the news media, from print to online journalism. Students will gain experience in learning the proper format and Associated Press style for writing news, features, and sports stories. Emphasis is placed on gathering information, covering the community, and understanding media ethics and laws.

JOUR 6 - Basic Photojournalism

3 units

2 hour lecture, 3 hours lab

Recommended Preparation: eligibility for ENGL 84

Credit, degree applicable

Transfer CSU

This course provides instruction in the elementary aspects of photography with emphasis on principles and techniques of photojournalism, including the history of photojournalism, the evolution of photo gear, camera use, news photography, feature photography, sports photography, photo essays, wedding photojournalism, social media, and caption writing. Emphasis is placed on preparing students to take photographs for print and online campus student publications (The Union newspaper, in print and online, and the annual Warrior Life magazine), using digital cameras and computer software such as Photoshop. At least one guest speaker will be invited to give a presentation during a lecture period.

Note: Journalism 6 is the same course as PHOT 106.

JOUR 7ab - Advanced Photojournalism

2 units

1 hour lecture, 3 hours lab

Prerequisite: JOUR 6 or PHOT 106 with a minimum grade of C in prerequisite or equivalent

Credit, degree applicable

Transfer CSU

This course provides instruction and laboratory experience in the taking and processing of photographs for publication in the college newspaper, newspaper website and news magazine. Students also receive experience in news, feature and sports photo editing, photo essay page design and layout, as well as digital photography and photo scanning techniques using Photoshop. All students enrolled in this course produce content for scholastic competition on the regional, state and national level. Students must also utilize social media, posting and sharing on Facebook, Twitter, etc.

Note: Journalism 7ab is the same course as PHOT 206ab.

JOUR 8 - Advanced Reporting and News Editing

3 units

3 hours lecture

Prerequisite: JOUR 1 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

This course will provide students with instruction in explanatory and investigative journalism, and opinion writing, and will incorporate the study of editing principles, style, and design to conform with professional models. Problems of law and libel will be discussed. Students will also be given hands-on instruction in newspaper and digital design, including graphics and multimedia. Leadership training, social media skills, and discussion of the business of journalism will also be provided.

(formerly Journalism 3ab)

JOUR 9abcd - Magazine Editing and Production

3 units

1 hour lecture, 3 hours lab per week to be arranged

Prerequisite: JOUR 1 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

This course covers all aspects of magazine production with an emphasis on writing and editing in-depth magazine feature stories, selecting photographs and art, designing pages, creating a production schedule, managing an editorial staff, overseeing advertising and producing a print and digital magazine for publication. Subsequent semesters of the course will strengthen writing, editing, and design skills by increasing the variety and sophistication of production experiences. Throughout this course, all students are trained and prepared to compete in a variety of journalism competitions.

JOUR 11abcd - Newspaper Publication

3 units

2 hours lecture, 3 hours lab to be arranged

Prerequisite: JOUR 1 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

This course provides instruction and laboratory experience in the writing, assembling, designing, and publishing of the college newspaper. Students receive experience in news, feature, opinion, review and sports writing as well as learn computer software programs to produce all aspects of the student newspaper. All students enrolled in this course produce content for scholastic competition on the regional, state, and national level.

JOUR 12 - Mass Media and Society

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC*

This course examines the past and current influences on American society of books, newspapers, magazines, movies, radio, television, recordings, and the internet. With a focus on critical thinking skills, students gain experience in reading and writing persuasive and argumentative essays about problems facing the mass media. Students also learn the history of the eight mass media as well as analyze and evaluate the functions, the responsibilities, the regulations, and the ethics involved in the mass media industry.

Note: The maximum UC credit allowed for students completing Journalism 12 and COMS 265 is one course.

JOUR 14abcd - Multimedia Journalism

3 units

2 hours lecture, 3 hours lab

Prerequisite: JOUR 1 with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course provides training in multimedia journalism with an emphasis on the principles and techniques of multimedia reporting, including preparing news for digital distribution using text, audio, video, and photographs. Students create multimedia news projects for publications using digital cameras, digital recorders, digital camcorders, and computer software. Throughout this course, all students are trained and prepared to compete in a variety of journalism competitions.

JOUR 95 - Cooperative Work Experience Education

2-4 units

hours to be arranged

Enrollment Limitation: Employment or volunteer work in a position related to the student's major or career goal by the second week of the semester. Completion of or current enrollment in one course from the major.

Credit, degree applicable

Transfer CSU*

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Journalism field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

Note: *Transfer limitations apply. The total units earned for Cooperative Work Experience Education may not exceed 16 units. (formerly Journalism 96abcd)

JOUR 99 - Independent Study

1-3 units

hours to be arranged

Enrollment Limitation: two courses in Journalism with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work

Credit, degree applicable

Transfer CSU*

This course provides special advanced studies in a subject field of Journalism not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Journalism projects (54 hours per unit).

Note: *Transfer limitations apply. For eligibility requirements, go to www.elcamino.edu/admissions/credit.asp (formerly Journalism 99abc)

LAW 4 - Legal Environment of Business

4 units

4 hours lecture

Recommended Preparation: ENGL 84

Credit, degree applicable

Transfer CSU*, UC

This course is an introduction to a legal environment in which a business firm operates. Topics include an introduction to the American legal systems, contracts, torts, product liability, forms of business organization, trade regulation, labor law, environmental law, and international business law.

Note: There may be CSU course limitations for students completing Law 4 and LAW 5. Check with the transfer school for transfer status of this course.

LAW 5 - Business Law

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU*

This course explores the fundamental legal principles pertaining to business transactions with an introduction to the legal process. Topics include sources of law and ethics, contracts, torts, agency, criminal law, negotiable instruments, business organizations, and judicial and administrative processes.

Note: There may be CSU course limitations for students completing Law 5 and LAW 4. Check with the transfer school for transfer status of this course.

LAW 11 - Introduction to Legal Research

3 units

3 hours lecture

Prerequisite: eligibility for ENGL 1A

Recommended Preparation: LAW 4 or LAW 5

Credit, degree applicable

Transfer CSU

This course will give the paralegal a general introduction into the basic legal research tools, including legal citation, legal analysis, and writing of legal memorandum and legal documents. The course includes a component of training in online computer research.

LAW 12 - Probate Procedures

3 units

3 hours lecture

Prerequisite: LAW 11 with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course is an overview of the procedural structure of basic practice. The course is designed to cover every aspect of probate procedures. All necessary forms and procedures will be examined and explained from the client interview to the closing of the estate. This course will cover all aspects of practice concerning conservatorship, guardianships of incompetents and guardianships of minors.

LAW 13 - Family Law

3 units

3 hours lecture

Prerequisite: LAW 11 with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course focuses on legally recognized relationships. Emphasis will be placed on the dissolution of a marriage including the legal theories behind the dissolution and the public policy supporting those theories. The course includes requirements of a valid marriage, a Judgment of Nullity, legal separation, dissolution of marriage proceedings, Order to Show Cause, and preparation of proper forms. This course also covers the concepts of separate and community property and division upon dissolution. Other aspects of family law including children's rights, adoption and guardianship are discussed.

LAW 14 - Tort Law

3 units

3 hours lecture

Prerequisite: LAW 11 with a minimum grade of C

Recommended Preparation: LAW 4 or LAW 5

Credit, degree applicable

Transfer CSU

This course includes the study of intentional wrongs, inadvertent wrongs, and that type of conduct for which the law imposes absolute liability. Special emphasis is given to concepts of causation, standard of care, reasonable person, duty, and defenses to liability. Also covered are wrongs which produce intangible harm such as defamation, invasion of privacy, misrepresentation, and misuse of legal process.

LAW 15 - Civil and Criminal Evidence

3 units

3 hours lecture

Prerequisite: LAW 11 with a minimum grade of C

Recommended Preparation: LAW 16

Credit, degree applicable

Transfer CSU

This course examines the rules of civil and criminal evidence. It emphasizes how to develop and utilize evidence and how to summarize documents and other evidence in an ordered and systematic matter so that the evidence will be readily available for use by the attorney in preparation for and use in trial.

LAW 16 - Civil Procedure

3 units

3 hours lecture

Prerequisite: LAW 11 with a minimum grade of C or concurrent enrollment in LAW 11 with department approval

Credit, degree applicable

Transfer CSU

This course examines civil court procedures before filing a lawsuit in a court of law through trial and appeal, and is designed to provide expertise in drafting legal documents from the inception of the civil action through the pleading stage. Topics include parties to the action, jurisdiction and venue, the summons, defaults, pleadings, and attacking the pleadings. Students are also introduced to the law of evidence.

LAW 17 - Legal Research and Writing

3 units

3 hours lecture

Prerequisite: LAW 11 with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course is an introduction to the practical writing skills and necessary analytical skills required in the law office. Topics include analysis of cases, analysis of statutes and administrative regulations, drafting and generating objective documents used in the legal environment, and generating and drafting persuasive documents submitted by attorneys to the trial and appellate courts.

LAW 18 - Wills, Trusts and Estate Planning

3 units

3 hours lecture

Prerequisite: LAW 11 with a minimum grade of C or equivalent experience

Credit, degree applicable

Transfer CSU

This course examines basic concepts and the proper use of wills and trusts in estate planning. Topics include the taxes through estate planning, probate, methods of holding title to property, tax effects of gifts, gifts to minors, laws of intestacy, state and federal tax requirements during life and upon death, guardianship, and conservatorship.

LAW 19 - Introduction to Legal Technology

3 units

2 hours lecture, 2 hours lab

Prerequisite: LAW 11 with a minimum grade of C or concurrent enrollment

Credit, degree applicable

Transfer CSU

This course is an introduction to the use of computers in the law office and the utilization of legal specific software for forms and document preparation. Emphasis is placed on how to automate document production and litigation support systems. Introduction to legal and general electronic information databases are covered. Current legal research software, such as Westlaw and Lexis, sources on the internet, and time and billing software are also included in the course.

LAW 20 - Paralegal Seminar

3 units

3 hours lecture

Prerequisite: LAW 17 with a minimum grade of C or concurrent enrollment

Credit, degree applicable

Transfer CSU

This course examines ethics, advanced paralegal communication skills, law office management, problem solving, and analysis skills. It also includes a component on employment, networking and job search.

Note: This course is designed to be taken at the end of the paralegal student's course of study.

LAW 95 - Cooperative Work Experience Education

2-4 units

hours to be arranged

Enrollment Limitation: Employment or volunteer work in a position related to the student's major or career goal by the second week of the semester. Completion of or current enrollment in one course from the major.

Credit, degree applicable

Transfer CSU*

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Law field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

Note: *Transfer limitations apply. The total units earned for Cooperative Work Experience Education may not exceed 16 units. (formerly Law 95abcd)

LIBR 1 - Introduction to Library Information Science

1 unit

1 hour lecture

Recommended Preparation: ENGL A

Credit, degree applicable

Transfer CSU, UC

Introduction to Library Information Science acquaints students with the organization of libraries and their resources, enabling them to develop strategies for library research. Students will learn how to locate and evaluate traditional and electronic types of library materials; how to document resources; and how to prepare a bibliography. Students will also acquire proficiency in the use of informational technology in order to understand the full potential of library resources.

LIBR 10 - Library Research Using the Internet

1 unit

1 hour lecture

Recommended Preparation: ENGL A

Credit, degree applicable

Transfer CSU, UC

Library Research Using the internet will familiarize students with library research as it relates to information access, search strategy development, and search engine capabilities of the internet. Other related topics include information competency and the evaluation, validation, and citation of internet sources.

Note: Letter grade or pass/no pass option.

MTT 2 - Manufacturing Print Reading

3 units
3 hours lecture
Credit, degree applicable
Transfer CSU

Students are introduced to engineering drawings and engineering specifications used in manufacturing industries. Representative drawings from simple production to complex assembly will be used to demonstrate concepts and for practice in interpreting the symbols and notations. Geometric Dimensioning and Tolerancing (GD&T) in accordance with American National Standards Institute (ANSI) Y-14.5 standard and the construction of simple machine parts are also discussed.

MTT 10A - Introduction to CAD/CAM

3 units
3 hours lecture, 1 hour lab
Credit, degree applicable
Transfer CSU

This course covers the study of the fundamental concepts of Computer Aided Manufacturing (CAM). Concepts explored will include the application of computers in manufacturing, Computer Aided Design (CAD), Computer Numerical Control (CNC) programming, Automated Manufacturing, and Integrated CAD/CAM.

MTT 10B - Computer Numerical Control Programming

3 units
3 hours lecture, 1 hour lab
Prerequisite: MTT 10A or equivalent MTT 40 or equivalent and MTT 46 or MTT 101 or equivalent with a minimum grade of C in prerequisite
Credit, degree applicable
Transfer CSU

This course covers the study of Computer Numerical Control (CNC) programming with emphasis on contouring, canned cycles, cutter diameter compensation, looping, macro subroutines and multiple part programming for three axis milling machines and CNC lathes.

MTT 10J - Numerical Control Graphics Programming

3 units
2 hours lecture, 3 hours lab
Recommended Preparation: MTT 10A, MTT 40, MTT 101 or equivalent
Credit, degree applicable
Transfer CSU

This basic course covers Computer Aided Manufacturing (CAM), emphasizing interactive graphics programming for Computer Numerical Control (CNC) machines. Concepts studied will include interactive geometry construction, tool motion, machine functions, repetitive programming, graphic output and graphic editing. Programs will be compiled using interactive graphics computer systems.

MTT 10K - 3D Numerical Control Graphics Programming

3 units
2 hours lecture, 3 hours lab
Prerequisite: MTT 10J with a minimum grade of C
Credit, degree applicable
Transfer CSU

This course covers Computer Aided Manufacturing (CAM), emphasizing interactive graphics programming for Numerical Control (NC) machines. Students will utilize various techniques of creating geometry on multiple work planes, three dimensional (3-D) surface toolpath creation and manipulation, implementing 4th and 5th axis machining, generating surface to surface intersections, creating blends between surfaces, creating roughing operations for 3D, and Computer Aided Design (CAD) data conversion for the purpose of 3D machining.

MTT 16 - General Metals

3 units
2 hours lecture, 4 hours lab
Credit, degree applicable
Transfer CSU

This course covers the general skills of metal working: machine shop practice, welding, bench metal, art metal, forge, foundry and sheet metal, design, construction, and occupational exploration.

Note: Letter grade or pass/no pass option.
(formerly Machine Tool Technology 16ab)

MTT 40 - Machine Shop Calculations

3 units

3 hours lecture

Recommended Preparation: MTT 2 and MATH 23

Credit, degree applicable

Transfer CSU

This course covers the study of machine shop problems involving the solution of formulas related to screw threads, feeds and speeds, spur gears, simple and angular indexing. Geometric figures, angles, triangles, circles, arcs, trigonometric functions, compound angles and oblique triangles will also be introduced.

MTT 46 - Basic Machine Tool Operation

3 units

2 hours lecture, 4 hours lab

Credit, degree applicable

Transfer CSU

Students are introduced to the basic principles and operation of machine tools with a focus on bench operations, drilling, engine lathes, mills, and grinding machines. Standard industry practices and tool set-ups used are emphasized. Laboratory projects and exercises related to the lectures and demonstrations will be assigned.

MTT 95 - Cooperative Work Experience Education

2-4 units

hours to be arranged

Enrollment Limitation: Employment or volunteer work in a position related to the student's major or career goal by the second week of the semester. Completion of or current enrollment in one course from the major.

Credit, degree applicable

Transfer CSU*

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Machine Tool Technology field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations

Note: *Transfer limitations apply. The total units earned for Cooperative Work Experience Education may not exceed 16 units. (formerly Machine Tool Technology 95abcd)

MTT 99 - Independent Study

1-3 units

hours to be arranged

Enrollment Limitation: two courses in Machine Tool Technology with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work

Credit, degree applicable

Transfer CSU*

This course provides special advanced studies in a subject field of Machine Tool Technology not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Machine Tool Technology projects (54 hours per unit).

Note: *Transfer limitations apply. For eligibility requirements, go to www.elcamino.edu/admissions/credit.asp (formerly Machine Tool Technology 99abc)

MTT 101 - Introduction to Conventional and CNC Machining

4 units

2 hours lecture, 6 hours lab

Credit, degree applicable

Transfer CSU

In this course, students will be introduced to the principles and operation of conventional and Computer Numerically Controlled (CNC) machine tools with an emphasis on safety, measurement, hand tools, power saws, drilling machines, lathes, and milling and grinding machines focusing on practices and setups used in industry.

Note: Letter grade or pass/no pass option. (formerly Machine Tool Technology 101abcd)

MTT 103 - Conventional and CNC Turning

4 units

2 hours lecture, 6 hours lab

Prerequisite: MTT 46 or MTT 101 with a minimum grade of C in prerequisite or equivalent

Credit, degree applicable

Transfer CSU

In this course, students will study at an advanced level the principles and operation of conventional and Computer Numerically Controlled (CNC) machine tools with an emphasis on the set up and operation of lathes. Topics will include safety, turning, drilling, boring, threading, cutting tools, CNC programming practices, and setups as applied in industry.

Note: Letter grade or pass/no pass option.

(formerly Machine Tool Technology 103abcd)

MTT 105 - Conventional and CNC Milling

4 units

2 hours lecture, 6 hours lab

Prerequisite: MTT 46 or MTT 101 with a minimum grade of C in prerequisite or equivalent

Credit, degree applicable

Transfer CSU

In this course, students will study at an advanced level the principles and operation of conventional and Computer Numerically Controlled (CNC) machine tools with an emphasis on the setup and operation of milling machines. Topics will include safety, drilling, milling, tapping, tooling, CNC programming practices, and setups as applied in industry.

Note: Letter grade or pass/no pass option.

(formerly Machine Tool Technology 105abcd)

MTT 107 - Advanced Manufacturing Processes

4 units

2 hours lecture, 6 hours lab

Prerequisite: MTT 46 or MTT 101 with a minimum grade of C in prerequisite or equivalent

Credit, degree applicable

Transfer CSU

In this course, students will study the principles and operation of machine tools with an emphasis on advanced manufacturing processes and machines, such as Electrical Discharge Machines (EDM), water abrasive jet machines, and grinding machines. Additional topics will include abrasives, coordinate measuring machines, advanced precision measurement, Geometric Dimensioning and Tolerancing (GD&T), optical comparators, and practices and setups as applied in industry.

Note: Letter grade or pass/no pass option.

(formerly Machine Tool Technology 107abcd)

MTT 201 - Introduction to Aerospace Fastener Technology

4 units

2 hours lecture, 6 hours lab

Recommended Preparation: MATH 12 and MTT 2 and MTT 40

Credit, degree applicable

Transfer CSU

In this course, students are introduced to fastener's standard measurement techniques, cold-heading (forging), thread-rolling, centerless grinding, turning, trimming, and interpretation of travelers (routers). Standard aerospace fastener industry practices, safety procedures, and set-ups are emphasized.

Note: Letter grade or pass/no pass option.

MTT 203 - Advanced Inspection of Fasteners and Measuring Instruments

3 units

2 hours lecture, 4 hours lab

Prerequisite: MTT 2 or MTT 40

Credit, degree applicable

Transfer CSU

Students are introduced to advanced fastener inspection. Standard measurement techniques with focus on microscopes, thread pitch gauges, Go-No Go gauges, micrometers, indicators, calipers, gauge-blocks, plug gauges, comparator, and interpretation of travelers. Standard aerospace fastener industry practices are emphasized.

Note: Letter grade or pass/no pass option.

MTEC 70 - Basic Robotics

2 units

1 hour lecture, 3 hours lab

Credit, degree applicable

Transfer CSU

Students will explore the technologies used to fabricate model robotics systems. Additional topics covered include basic electronics theory, electro-mechanical assembly, motors and micro-controller operation, basic programming, and careers in technology. Students will construct and test prototype robots. Project building and problem solving will be emphasized.

MTEC 75 - Integrated Robotic and Automated Technologies

3 units

2 hours lecture, 4 hours lab

Recommended Preparation: ECHT 11, MTEC 70.

Credit, degree applicable

Transfer CSU

This course covers robotic and automation applications with emphasis on imbedded electronics, micro-controller programming, motors, and drive trains. Additional topics covered include electronics theory, electro-mechanical fabrication, sensors, manufacturing materials and processes, and career fields in which robotic applications are used. Students will construct, program, and test a vehicular or process robot.

Note: This course is the same as the two-course sequence MTEC 75A and MTEC 75B.

MTEC 75A - Integrated Robotic and Automated Technologies I

1.5 units

1 hour lecture, 2 hours lab

Recommended Preparation: ECHT 11, MTEC 70

Credit, degree applicable

Transfer CSU

This is the first course in a two-course sequence that covers robotic and automation applications with emphasis on electronics theory, electromechanical fabrication, motors, and drive trains. Students will construct, program, and test a vehicular or process robot.

Note: The two-course sequence Manufacturing Technology 75A and MTEC 75B is the same as MTEC 75

MTEC 75B - Integrated Robotic and Automated Technologies II

1.5 units

1 hour lecture, 2 hours lab

Recommended Preparation: ECHT 11, MTEC 70, and MTEC 75A

Credit, degree applicable

Transfer CSU

This is the second course in a two-course sequence that covers robotic and automation applications with emphasis on imbedded electronics, microcontroller programming, sensors, manufacturing materials and processes. Students will construct, program, and test a vehicular or process robot to satisfy instructor assigned goals or tasks.

Note: The two-course sequence MTEC 75A and 75B is the same as MTEC 75.

MTEC 99 - Independent Study

1-3 units

hours to be arranged

Enrollment Limitation: two courses in Manufacturing Technology with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work

Credit, degree applicable

Transfer CSU*

This course provides special advanced studies in a subject field of Manufacturing Technology not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Manufacturing Technology projects (54 hours per unit).

Note: *Transfer limitations apply. For eligibility requirements, go to www.elcamino.edu/admissions/credit.asp (formerly Manufacturing Technology 99abc)

MATH 12 - Basic Arithmetic Skills

3 units
4 hours lecture
Credit, not degree applicable

This introductory arithmetic course is designed to develop number and operation sense using whole numbers, fractions, decimals, and percents, as well as develop problem-solving skills. Topics include writing whole numbers and decimals in various forms, estimation, ratios, proportions, and applications.

Note: Students enrolled in this course are required to participate in individual and group activities.

MATH 17A - Math Academy: Arithmetic

0 units
7 hours lecture, 1 hour lab (6 week course)
Prerequisite: qualification by testing (El Camino College Mathematics Placement Test) and assessment
Recommended Preparation: HDEV 101 or concurrent enrollment
Noncredit

This course is designed to develop student's number and operation sense working with whole numbers, fractions, decimals, and percents, as well as develop problem-solving skills. Topics include operations on whole numbers and decimals, estimations, ratios, proportions, applications, an introduction to variables, algebraic equations, and signed numbers.

Note: This course is designed for students who placed into MATH 12. This course is repeatable and open for enrollment at registration and at any time during the semester.

MATH 23 - Pre-Algebra

3 units
4 hours lecture
Recommended Preparation: MATH 12 with a minimum grade of C or qualification by appropriate assessment
Credit, not degree applicable

This course bridges the gap between arithmetic and formal algebra, developing number sense and operation sense, in order to formulate and solve algebraic equations with integers, fractions, and percents. Algebraic principles are applied to problems from a variety of fields. Other topics include: proportional reasoning, spatial reasoning, informal geometry and measurement, coordinate graphing, informational graphs, and data collection and description.

MATH 27A - Math Academy: Pre-Algebra

0 units
7 hours lecture, 1 hour lab (6 week course)
Prerequisite: MATH 12 with a minimum grade of C or qualification by testing (El Camino College Mathematics Placement Test) and assessment
Recommended Preparation: HDEV 101 or concurrent enrollment
Noncredit

This course bridges the gap between arithmetic and formal algebra, developing number sense and operation sense, in order to formulate and solve algebraic equations with integers, fractions, and percent. Algebraic principles are applied to problems from a variety of fields. Other topics include proportional reasoning, spatial reasoning, informal geometry and measurement, coordinate graphing, and informational graphs.

Note: This course is designed for students who passed MATH 12 or who placed into MATH 23. This course is repeatable and open for enrollment at registration and at any time during the semester.

MATH 37 - Basic Accelerated Mathematics

5 units
4.5 hours lecture, 3.5 hours lab
Credit, degree applicable

This accelerated course provides students who place below the elementary algebra level the opportunity to develop numeracy skills, strengthen mathematical reasoning skills, and complete elementary algebra in a single semester. There are three levels of mathematics in this course, taught in an integrated fashion: basic arithmetic skills fundamentals of algebra, with an emphasis on linear equations and the remaining topics found in a typical elementary algebra course. This course has multiple exit levels, based on a student's demonstrated competencies. Students engage in student success activities, including creating an education plan with a counselor, and participation in supplemental instruction.

Note: This course is not recommended for students who place at or above the elementary algebra level. Pass/no pass only.

MATH 40 - Elementary Algebra

4 units

4 hours lecture

Recommended Preparation: MATH 23 or MATH 37 or qualification by appropriate assessment

Credit, degree applicable

This course in elementary algebra includes the study of real number solutions and applications of linear equations, quadratic equations, linear inequalities, and systems of linear equations. Other topics include coordinate graphing or linear equations, factoring techniques, and simplification of rational and radical expressions. Note: Mathematics 40 is equivalent to one year of high school algebra.

MATH 47A - Math Academy: Elementary Algebra

0 units

7 hours lecture, 1 hour lab (6 week course)

Prerequisite: MATH 23 with a minimum grade of C or qualification by testing (El Camino College Mathematics Placement Test) and assessment

Recommended Preparation: HDEV 101 or concurrent enrollment

Noncredit

This elementary algebra course is the study of real number solutions and applications of linear equations, quadratic equations, linear inequalities, and systems of linear equations. Other topics include coordinate graphing or linear equations, factoring techniques, and simplification of rational and radical expressions.

Note: This course is designed for students who passed MATH 23 or who placed into MATH 40. This course is repeatable and open for enrollment at registration and at any time during the semester.

MATH 60 - Elementary Geometry

4 units

4 hours lecture

Prerequisite: MATH 40 or Mathematics 43 with a minimum grade of C in prerequisite or credit in MATH 37 or qualification by testing (El Camino College Mathematics Placement Test) and assessment

Credit, degree applicable

This is an introductory course in geometry. Topics include: properties of geometric figures including circles, triangles and other polygons, congruence and similarity, and elementary logical reasoning. Formal proof is introduced and used throughout the course.

Note: This course is equivalent to one year of high school geometry.

MATH 67 - General Education Algebra

5 units

5 hours lecture

Prerequisite: MATH 23 with a minimum grade of C or MATH 37 with a grade of P with evidence of passing levels A and B or MATH 40 with a minimum grade of C or qualification by appropriate assessment

Credit, degree applicable

Using data and real-world applications, students in this accelerated course reinforce their numeracy skills and learn algebra and other quantitative reasoning skills needed for transfer-level general education mathematics courses.

Note: Mathematics 67 is intended for students who place at the elementary algebra level. Mathematics 67 is a prerequisite course only for MATH 110, MATH 115, MATH 120, MATH 140, and MATH 150. Mathematics, computer science, science, engineering, and business students should not take Mathematics 67. These students should be directed to Mathematics 80.

MATH 73 - Intermediate Algebra for General Education

5 units

5 hours lecture

Prerequisite: MATH 40 with a minimum grade of C or MATH 37 with a grade of P and evidence of having passed Levels A, B, and C or qualification by appropriate assessment

Credit, degree applicable

This intermediate algebra course is designed for students who are not considering further study in the sciences, technology, engineering, or mathematics. In the context of studying basic functions and their graphs, students strengthen and expand their algebra skills. Functions studied include linear, quadratic, polynomial, rational, and radical functions, as well as the absolute value function. Particular emphasis is placed on the operations on functions, solving equations and inequalities, as well as using functions to model real life situations. Other topics include solving systems of equations and applications.

Note: Mathematics 73 serves as a prerequisite course only for MATH 110, MATH 115, MATH 120, MATH 140 and MATH 150.

MATH 80 - Intermediate Algebra for Science, Technology, Engineering, and Mathematics

5 units

5 hours lecture

Prerequisite: MATH 40 with a minimum grade of C or MATH 37 with a grade of P and evidence of having passed Levels A, B, and C or qualification by appropriate assessment

Credit, degree applicable

This intermediate algebra course is designed for students who are considering further study in the sciences, technology, engineering, or mathematics. In the context of studying a large library of basic functions and their graphs, students strengthen and expand their algebra skills. The library includes linear, quadratic, polynomial, rational, radical, exponential, and logarithmic functions, as well as inverse functions and the absolute value function. Particular emphasis is placed on the operations on functions, as well as solving equations and inequalities. Other topics include solving systems of equations, operations on complex numbers, and applications.

Note: Mathematics 80 serves as a prerequisite course for the first courses in the Business and Social Sciences (MATH 130) and STEM calculus (MATH 170) sequences as well as MATH 110, MATH 115, MATH 120, MATH 130, MATH 140 and MATH 150.

MATH 80S - Intermediate Algebra Support

2 units

2 hours lecture

Corequisite: MATH 80

Credit, not degree applicable

This course is designed to support students concurrently enrolled in Intermediate Algebra for Science, Technology, Engineering and Mathematics (Math 80). As needed, students review core skills and topics necessary to meet the intermediate algebra student learning outcomes and objectives. Students explore strategies and habits used by successful independent learners. Topics reviewed in this support course may include: computational fluency, algebraic symbolism and its use in solving problems, solving and graphing intermediate algebra functions using real-world application models, and systems of equations and inequalities in two variables. Students will study topics through multiple representations: tables, algebraic symbols, language, and graphs.

MATH 99 - Independent Study

1-3 units

Enrollment Limitation: Completion of two Mathematics courses that are transferable to CSU or UC with a minimum grade of B in each course and acknowledgment by the instructor with whom the student will work.

Credit, degree applicable

Transfer CSU*

This course provides special advanced studies in a subject field of Mathematics not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Mathematics research projects (54 hours per unit).

Note: *Transfer limitations apply. For eligibility requirements, go to www.elcamino.edu/admissions/credit.asp (formerly Mathematics 99abc)

MATH 100 - Supervised Tutoring: Mathematics

0 units

4 hours lab per week to be arranged

Enrollment Limitation: referral by instructor or counselor based on assessed academic need

Noncredit

This course provides students with supervised tutoring related to their assignments in all mathematics courses offered at El Camino College. The tutoring addresses the application of learning skills, the use of learning resources, and the review of course content.

Note: This course is repeatable and open for enrollment at registration and at any time during the semester.

MATH 110 - Structures and Concepts in Mathematics

3 units

2 hours lecture, 3 hours lab

Prerequisite: MATH 67 or MATH 73 or MATH 80 with a minimum grade of C in prerequisite or qualification by appropriate assessment

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC*

As an introduction to the use of logical, quantitative, and spatial reasoning in the discipline of mathematics, students in this course examine the mathematical topics of set theory, numeration, number theory, functions, graphs, patterns and the structure of real numbers. Students investigate the interrelationships among these topics, with an emphasis on algebraic, geometric and kinesthetic modeling, inductive and deductive logic, and proofs using pictures. Designed for pre-service elementary school teachers, this course is appropriate for all students interested in a deeper understanding of the structure of mathematics.

Note: The maximum UC credit allowed for students completing Mathematic 110, MATH 115, and MATH 116 is one course.

MATH 115 - Probability and Statistics for Prospective Elementary School Teachers

3 units

2 hours lecture, 2 hours lab

Prerequisite: MATH 67 or MATH 73 or MATH 80 with a minimum grade of C in prerequisite or qualification by appropriate assessment

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC*

This course is designed to provide a comprehensive and in-depth exploration of the concepts in probability and statistics. Topics include creating and interpreting graphs, random variables and sampling, measures of central tendency and dispersion, analysis of experiments including hypothesis testing, design of experiments, and data gathering. In addition, basic laws of probability, logic and set theory including dependent, independent, and mutually exclusive events, odds, and expected values will be examined.

Note: The maximum UC credit allowed for students completing MATH 110, MATH 115, and MATH 116 is one course.

MATH 116 - Geometry and Measurement for Prospective Elementary School Teachers

3 units

2 hours lecture, 2 hours lab

Prerequisite: MATH 60 and MATH 110 with a minimum grade of C in prerequisite or equivalent

Credit, degree applicable

Transfer CSU, UC*

In this course, designed for prospective elementary school teachers, students focus on the conceptual and procedural understanding of geometry and measurement. Students explore informal geometry, congruence, similarity, constructions, transformations, tessellations, and measurement involving both English and metric units in one, two, and three dimensions. The use of appropriate units in real-world geometric situations is emphasized throughout the course. Group activities, hands-on activities and use of computer software are integrated throughout the course.

Note: The maximum UC credit allowed for students completing MATH 110, MATH 111, MATH 115, and 116 is one course.

MATH 120 - Nature of Mathematics

3 units

3 hours lecture

Prerequisite: MATH 73 or MATH 80 with a minimum grade of C in prerequisite or qualification by appropriate assessment

Credit, degree applicable

Transfer CSU, UC

This course surveys general ideas and concepts of mathematics, including mathematics of finance, set theory, combinatorics, probability, statistics, voting systems, logic, and applications of Euclidean geometry.

Note: This course meets the CSU general education requirement for mathematics and quantitative reasoning.

MATH 130 - College Algebra

3 units

3 hours lecture

Prerequisite: MATH 80 with a minimum grade of C or qualification by testing (El Camino College Mathematics Placement Test) and assessment

Credit, degree applicable

Transfer CSU UC*

In this course, students will explore polynomial, radical, rational, exponential, and logarithmic functions and their graphs, as well as sequences and series.

Note: *The maximum UC credit allowed for students completing Mathematics 130 and Mathematics 180 is one course. This is a preparatory course for MATH 165 - Calculus for Business and Social Sciences.

MATH 130S - College Algebra Support

1 unit

1 hour lecture

Corequisite: MATH 130

Credit, not degree applicable

This course is designed to support students concurrently enrolled in College Algebra (Math 130). As needed, students review core skills and topics necessary to meet the College algebra student learning outcomes and objectives. Students explore strategies and habits used by successful independent learners. Topics reviewed in this support course may include: a review of the computational skills developed in intermediate algebra; operations on polynomial, rational, radical, exponential, and logarithmic expressions; functions and transformations of their graphs; solving equations and inequalities; and setting up and solving application problems.

MATH 140 - Finite Mathematics for Business and Social Sciences

4 units

4 hours lecture

Prerequisite: MATH 67 or MATH 73 or MATH 80 with a minimum grade of C in prerequisite or qualification by testing (El Camino College Mathematics Placement Test) and assessment

Credit, degree applicable

Transfer CSU, UC

This course consists of a study of the Gauss-Jordan method, matrices, linear programming from a geometrical approach, logic sets, combinatorics, probability, Bayes' theorem, random variables, descriptive statistics, and Markov chains.

MATH 150 - Elementary Statistics with Probability

4 units

4 hours lecture

Prerequisite: MATH 67 or MATH 73 or MATH 80 with a minimum grade of C in prerequisite or qualification by testing (El Camino College Mathematics Placement Test) and assessment

Credit, degree applicable

Transfer CSU, UC*

The focus of this course is the basic practice of statistics, including descriptive statistics, inferential statistics, and the role probability plays in statistical analysis. Students calculate and interpret various descriptive statistics using graphing calculators with statistical testing capabilities and statistical software, as well as by hand. Major topics include methods of data collection and simulation; measures of central tendency, variability, and relative position; graphical summaries of data; linear regression and correlation; distributions, including normal and binomial distributions; probability theory; and inferential statistical methods. Students choose, justify, use, and interpret the results of inferential techniques, such as confidence intervals, hypothesis tests, goodness of fit, analysis of variance, and nonparametric tests.

Note: The maximum UC credit allowed for students completing Mathematics 150 and PSYC 9A or Mathematics 150 and Sociology 109 is one course.

MATH 150H - Honors Elementary Statistics with Probability

4 units

4 hours lecture

Prerequisite: MATH 67 or MATH 73 or MATH 80 with a minimum grade of C in prerequisite or qualification by testing (El Camino College Mathematics Placement Test) and assessment

Credit, degree applicable

Transfer CSU, UC*

This honors course, intended for students in the Honors Transfer Program, will include practice of statistics, including descriptive statistics, inferential statistics, and the role probability plays in statistical analysis. Students will calculate and interpret various descriptive statistics using graphing calculators with statistical testing capabilities or statistical software, as well as by hand. Major topics include methods of data collection and simulation; measures of central tendency, variability, and relative position; graphical summaries of data; linear regression and correlation; distributions, including normal and binomial distributions; probability theory; and inferential statistical methods. Students will choose, justify, use, and interpret the results of inferential techniques, such as confidence intervals, hypothesis tests, goodness of fit, analysis of variance, and nonparametric tests. This course emphasizes extensive, rigorous demonstrations of understanding the concepts of statistics. Students will also complete at least one project demonstrating an application or synthesis of topics covered in the course.

Note: The maximum UC credit allowed for students completing MATH 150 and PSYC 9A or MATH 150 and Sociology 109 is one course.

MATH 150S - Elementary Statistics Support

1 unit

1 hour lecture

Corequisite: MATH 150

Credit, not degree applicable

This course is designed to support students concurrently enrolled in Elementary Statistics (Math 150). As needed, students review core skills and topics necessary to meet the Elementary Statistics student learning outcomes and objectives. Students explore strategies and habits used by successful independent learners. Topics reviewed in this support course may include: concepts from arithmetic, pre-algebra, elementary and intermediate algebra, and descriptive statistics that are needed to understand the basics of college-level statistics.

MATH 165 - Calculus for Business and Social Sciences

5 units

5 hours lecture

Prerequisite: MATH 130 or MATH 180 with a minimum grade of C in prerequisite or qualification by testing (El Camino College Mathematics Placement Test) and assessment

Credit, degree applicable

Transfer CSU, UC

This course consists of an introduction to differential and integral calculus with business and social science applications to include polynomial, rational, exponential and logarithmic functions and their graphs multi-variable calculus to include partial differentiation, optimization, and introduction to differential equations.

MATH 170 - Trigonometry

3 units

3 hours lecture

Prerequisite: MATH 60 and MATH 80 with a minimum grade of C in prerequisite or qualification by testing (El Camino College Mathematics Placement Test) and assessment

Credit, degree applicable

Transfer CSU

This course includes a study of trigonometric functions, their inverses, identities, equations, complex numbers, graphs, and applications.

Note: One year of high school geometry is equivalent to MATH 60.

MATH 170S - Trigonometry Support

1 unit

1 hour lecture

Corequisite: MATH 170

Credit, not degree applicable

This course is designed to support students concurrently enrolled in Trigonometry (Math 170). As needed, students review core skills and topics necessary to meet the Trigonometry student learning outcomes and objectives. Students explore strategies and habits used by successful independent learners. Topics reviewed in this support course may include: operations on polynomial, rational, and radical expressions; functions and transformations of their graphs; solving equations and inequalities; a review of topics from geometry; and setting up and solving application problems.

MATH 180 - Pre-Calculus

5 units

5 hours lecture

Prerequisite: MATH 170 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC*

This course is a preparation for calculus. Topics of study include polynomial, rational, exponential, logarithmic, and trigonometric functions as well as their inverses. Matrices and analytic geometry are introduced, as well as sequences and series. The application of these topics is stressed to enhance conceptual understanding of the material.

Note: The maximum UC credit allowed for students completing Mathematics 180 and MATH 130 is one course.

MATH 180S - Precalculus

2 units

2 hours lecture

Corequisite: MATH 180

Credit, not degree applicable

This course is designed to support students concurrently enrolled in Precalculus (Math 180). As needed, students review core skills and topics necessary to meet the Precalculus student learning outcomes and objectives. Students explore strategies and habits used by successful independent learners. Topics reviewed in this support course may include: a review of the computational skills developed in intermediate algebra; operations on polynomial, rational, radical, exponential and logarithmic expressions; functions and transformations of their graphs; solving equations and inequalities; and solving application problems.

MATH 190 - Single Variable Calculus and Analytic Geometry I

5 units

5 hours lecture

Prerequisite: MATH 180 with a minimum grade of C or qualification by testing (El Camino College Mathematics Placement Test) and assessment

Credit, degree applicable

Transfer CSU, UC*

In this course students will be introduced to topics such as limits, continuity, derivatives and antiderivatives of algebraic and transcendental functions; definite integrals of algebraic and transcendental functions with and without the fundamental theorem of calculus; linear approximations; relating features of a function's graph to its derivatives; and application problems using derivatives as well as implicit differentiation. Problem solving using computer software is also addressed

Note: The maximum UC credit allowed for calculus is one course from either MATH 165 or Math 160 or 161 or Math 190 or MATH 191.

MATH 191 - Single Variable Calculus and Analytic Geometry II

5 units

5 hours lecture

Prerequisite: MATH 190 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC*

This course includes a study of methods and applications of integration, , improper integrals, numerical integration, infinite sequences, infinite series and power series, parametric equations, and polar equations.

Note: The maximum UC credit allowed for students completing Mathematics 160 and 161 and MATH 190 and 191 is one series.

MATH 210 - Introduction to Discrete Structures

5 units

5 hours lecture

Prerequisite: MATH 190 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course blends mathematical reasoning, combinatorial analysis, discrete structures, algorithmic thinking and modeling to study the problems that occur in computer science and mathematics. Topics covered include: logic, sets, proofs, functions, relations, number theory, counting, probability, graphs and trees.

MATH 220 - Multi-Variable Calculus

5 units

5 hours lecture

Prerequisite: MATH 191 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course is a study of calculus in several variables, including partial differentiation, tangent planes to surfaces, directional derivatives, and optimization problems. Topics include integral calculus in several variables including line, surface, and volume integrals, and the theorems of Green, Gauss (Divergence) and Stokes as generalizations of the Fundamental Theorem of Calculus and topics in vector algebra and solid analytic geometry.

MATH 270 - Differential Equations with Linear Algebra

5 units

5 hours lecture

Prerequisite: MATH 220 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course consists of a study of first-order ordinary differential equations, systems of linear equations, matrices, determinants, vector spaces, linear transformations, linear second-order ordinary differential equations, power series solutions, numerical methods, Laplace transforms, eigenvalues, eigenvectors, and systems of linear differential equations and applications.

MEDT 1 - Medical Terminology

3 units

3 hours lecture

Recommended Preparation: ENGL 84

Credit, degree applicable

Transfer CSU

This course provides study and practical application of a medical vocabulary system according to body systems. Students review the basic construction of medical words, concentrating on word origins, root words, prefixes, and suffixes. Word structure, recognition, analysis, definition, spelling, and pronunciation are presented in the context of medical terms for organs, diseases, symptoms, diagnostic tests, and medical surgical procedures.

MICR 33 - General Microbiology

5 units

3 hours lecture, 6 hours lab

Prerequisite: BIOL 10 or BIOL 10H or ANAT 30 or ANAT 32 or PHYO 31 or Anatomy and Physiology 34A and CHEM 4 or CHEM 4H or CHEM 1A or CHEM 20 or CHEM 21A with a minimum grade of C in prerequisite or equivalent

Transfer CSU, UC

This course is a study of microbial anatomy and physiology, classification, microbes in water, air, soil, food, sewage, and medical aspects of microbiology. It also includes the study of fundamental techniques in the growth, culture, and identification of microorganisms. Laboratory experiments are performed by students to reinforce principles of microbiology discussed in lecture. This course is designed for students planning to pursue careers in the health sciences or other life sciences.

MUSI 96 - Cooperative Work Experience Education

2-4 units

hours to be arranged

Enrollment Limitation: Employment or volunteer work in a position related to the student's major or career goal by the second week of the semester. Completion of or current enrollment in one course from the major.

Credit, degree applicable

Transfer CSU*

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Music field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

Note: *Transfer limitations apply. The total units earned for Cooperative Work Experience Education may not exceed 16 units.

MUSI 99 - Independent Study

1-3 units

hours to be arranged

Enrollment Limitation: two courses in Music with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work

Credit, degree applicable

Transfer CSU*

This course provides special advanced studies in a subject field of Music not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Music projects (54 hours per unit).

Note: *Transfer limitations apply. For eligibility requirements, go to www.elcamino.edu/admissions/credit.asp (formerly Music 99abc)

MUSI 101 - Music Fundamentals

3 units

3 hours lecture

Credit, degree applicable

Transfer CSU, UC

This course is an introduction to the notation and primary elements of tonal music from global cultures. It prepares students for further study in theory and musicianship, and serves to enhance the study and appreciation of music for all interested students. Students will analyze music beginning with pitch and rhythm notation, the keyboard and major scales. The course proceeds through intervals, triads, seventh chords, inversions, minor scales, cadences, modes and non-harmonic tones. Included are terms and symbols for tempi, dynamics, and repeats. The history and social context of the above concepts will be discussed.

(formerly Music 1)

MUSI 102A - Beginning Sightsinging

2 units
2 hours lecture
Credit, degree applicable
Transfer CSU, UC

This course develops fundamental skills for reading and singing music at sight. This includes pitch and rhythm notation, key signatures, intervals, major and minor modes, and melodies. Class assignments will incorporate exercises in sightsinging, including melodic and rhythmic dictation.

(formerly Music 2A)

MUSI 102B - Advanced Sightsinging

2 units
2 hours lecture
Prerequisite: MUSI 101 or MUSI 102A or MUSI 131A with a minimum grade of C in prerequisite or equivalent
Credit, degree applicable
Transfer CSU, UC

This course continues the development of essential skills for reading and singing music at sight, including ear training and singing of major and minor mode-scales, intervals, chords, rhythms and melodies of increasing difficulty. Class assignments will incorporate exercises in melodic, rhythmic and harmonic sightsinging and dictation.

(formerly Music 2B)

MUSI 103A - Theory and Musicianship I

4 units
5 hours lecture
Prerequisite: MUSI 101 with a minimum grade of C or equivalent
Recommended Preparation: MUSI 102A and MUSI 131A or equivalent and ENGL 84 or ESL 52B
Credit, degree applicable
Transfer CSU, UC

In this course designed for the music major, students acquire knowledge of tonal harmony and develop corresponding aural skills. Four-part voice leading principles, harmonic progression, Roman numeral analysis, musical form, and non-chord tones are emphasized. Appropriate exercises in sight-singing and dictation will accompany written work.

(formerly Music 3A)

MUSI 103B - Theory and Musicianship II

4 units
5 hours lecture
Prerequisite: MUSI 103A with a minimum grade of C or equivalent
Recommended Preparation: MUSI 102A or MUSI 102B MUSI 131B or equivalent
Credit, degree applicable
Transfer CSU, UC

This course is a continuation of Music 103A and expands the study of tonal music by enlarging the harmonic vocabulary to include diatonic seventh chords and secondary functions. Modulation types common to music of the 18th century and small forms will also be discussed. Appropriate exercises in sight-singing and dictation will accompany written work.

(formerly Music 3B)

MUSI 105 - Commercial/Jazz Theory and Musicianship

3 units
3 hours lecture
Prerequisite: MUSI 101 with a minimum grade of C or equivalent
Recommended Preparation: MUSI 103A or equivalent
Credit, degree applicable
Transfer CSU, UC

In this course, students acquire knowledge of tonal harmony used in commercial music and jazz. Emphasis is placed on harmonic, rhythmic and melodic vocabularies chord-scale relationships, and basic keyboard applications. Students develop skills in ear training, writing transcriptions of recorded performances, composition, and music manuscript preparation.

(formerly Music 5)

MUSI 111 - Music Appreciation Survey

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course focuses on the major stylistic periods of Western art music from the Middle Ages until the end of the 20th Century. An emphasis will be placed on the music heard in North American and European concert halls. Examples will be presented in the context of contemporaneous social, political, and artistic movements and events. Basic musical elements, terminology, voice categories, and instruments of the orchestra will be included.

(formerly Music 11)

MUSI 112 - Music Cultures of the World

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CU, UC

This course focuses on the styles, techniques, performers, and historical evolution of Western and non-Western music. Emphasis is placed on African, Asian, Latin American, and Polynesian music and the relationship between the music and the culture. In addition, American ethnic music and jazz will be presented.

(formerly Music 12)

MUSI 112H - Honors Music Cultures of the World

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

The honors course, intended for students in the Honors Transfer Program, focuses on the styles, techniques, performers, and historical evolution of Western and non-Western music. Emphasis is placed on African, Asian, Latin American, and Polynesian music, and the relationship between the music and the culture. In addition, American ethnic music and jazz will be presented. This course is enriched through extensive, rigorous reading, writing, and research assignments.

Note: Students may take either MUSI 112 or Music 112H. Duplicate credit will not be awarded for MUSI 112 and Music 112H.

MUSI 113 - Survey of Jazz

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course focuses primarily on the techniques, styles, performers, and historical evolution of jazz. In addition, a survey of African and African-American predecessors of jazz will be presented.

(formerly Music 13)

MUSI 116 - History of Rock Music

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL A

Transfer CSU, UC

This course focuses on the techniques, styles, composers, performers, and evolution of rock and roll from the 1950s to the present. Emphasis is placed on the roots and early development of rock music, its stylistic trends, influential artists, and the impact of technology on rock music throughout the years.

(formerly Music 16)

MUSI 117 - Music of the Beatles

3 units

3 hours lecture

Recommended Preparation: ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course surveys musical styles of the Beatles from 1957-1970. It focuses on the historical, aesthetic, socialpolitical, economic, and technological developments that have shaped the evolution of popular music. Emphasis is placed on identifying the Beatles' various musical periods, stylistic practices in compositions and concerts, and reflections of and impacts on the cultural and social issues of their time.

(formerly Music 17)

MUSI 120 - Voice Class I

2 units

2 hours lecture, 1 hour lab

Credit, degree applicable

Transfer CSU, UC

This course introduces principles and techniques of singing, musicianship and song repertoire. Attendance at selected musical events at El Camino College Center for the Arts is required.

(formerly Music 18ab)

MUSI 130 - Beginning Jazz Improvisation

2 units

1 hour lecture, 3 hours lab

Enrollment Limitation: audition at first-class meeting (ability to perform music of moderate difficulty on an instrument or vocally)

Recommended Preparation: MUSI 101 or equivalent

Credit, degree applicable

Transfer CSU, UC

This course is a study of the basic techniques of jazz improvisation. Emphasis is placed on the study and application of scales, chords, patterns, and "licks" used by musicians to create improvisations on tonal, modal, and blues-based songs. Except for keyboards, amplifiers and drums, students must provide their own instruments for classroom performances.

(formerly Music 30ab)

MUSI 131A - Beginning Piano I

2 units

2 hours lecture, 1 hour lab

Credit, degree applicable

Transfer CSU, UC

This course is designed for the beginning piano student. It introduces music notation and its application to playing piano music and proceeds through pieces and exercises of advancing difficulty for the elementary player. Concepts and techniques of musicianship and music theory are emphasized.

(formerly Music 31A)

MUSI 131B - Beginning Piano II

2 units

2 hours lecture, 1 hour lab

Prerequisite: MUSI 131A with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC

This course is a continuation of MUSI 131A (Beginning Piano I) using increasingly complex materials. Students will attend selected musical events at the El Camino College Center for the Arts.

(formerly Music 31B)

MUSI 143 - Beginning Woodwind Instruments

2 units
2 hours lecture, 1 hour lab
Credit, degree applicable
Transfer CSU, UC

This course for the beginning musician introduces basic skills and techniques for playing a woodwind instrument. Students select from flute, clarinet, saxophone, oboe, or bassoon. Music reading, tone production, breath control, technique, musicianship, and instrument care are emphasized. Students must provide their own instruments.

(formerly Music 43abcd)

MUSI 144 - Beginning Brass Instruments

2 units
2 hours lecture, 1 hour lab
Credit, degree applicable
Transfer CSU, UC

This course for the beginning musician introduces basic skills and techniques for playing a brass instrument. Students select from trumpet, French horn, trombone, euphonium, or tuba. Music reading, tone production, breath control, technique, musicianship, and instrument care are emphasized. Students must provide their own instruments.

(formerly Music 44abcd)

MUSI 145 - Beginning Percussion Instruments

2 units
2 hours lecture, 1 hour lab
Credit, degree applicable
Transfer CSU, UC

This course for the beginning musician introduces basic skills and techniques for playing snare drum and drum set. Music reading, drum rudiments, percussion techniques, and musicianship are emphasized. Students must provide their own sticks and practice pad.

(formerly Music 45abcd)

MUSI 146 - Beginning String Instruments

2 units
2 hours lecture, 1 hour lab
Credit, degree applicable
Transfer CSU, UC

This course for the beginning musician introduces basic skills and techniques for playing a string instrument. Students select from violin, viola, cello, and string bass. Music reading, tone production, technique, musicianship, and instrument care are emphasized. Students must provide their own instruments.

(formerly Music 46abcd)

MUSI 147A - Beginning Guitar

2 units
2 hours lecture, 1 hour lab
Credit, degree applicable
Transfer CSU, UC

This course will focus on fundamental aspects of holding, tuning, and basic performance techniques for pickstyle guitar. Students will be introduced to the fundamentals of music including reading notation and basic music theory. Students will examine melodies, strumming patterns, and chord playing through the use of both traditional and contemporary popular music repertoire.

(formerly Music 47ab)

MUSI 147B - Beginning Guitar II

2 units

2 hours lecture, 1 hour lab

Prerequisite: MUSI 147A with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC

This course is a continuation of Beginning Guitar I. Course content includes extended chord vocabulary, continuation of music notation reading, and study of popular music repertoire.

MUSI 151abcd - Mixed Chorus

1 unit

4 hours lab per week to be arranged

Transfer CSU, UC

In this course, the basic principles of choral technique are introduced through the performance of literature from a variety of style periods. Some of the styles include Renaissance, Baroque, Classical, Romantic, Gospel and Jazz. Student performances are held on and off campus each semester.

(formerly Music 51abcd)

MUSI 152abcd - Concert Choir

1 unit

4 hours lab per week to be arranged

Credit, degree applicable

Transfer CSU, UC

This is a non-audition ensemble designed for the study and performance of choral works of various styles. Emphasis is placed on development of the voice in relationship to choral singing and the continuous growth of musicianship appropriate to choral literature. The ensemble will perform in concert at the conclusion of each semester.

Note: Letter grade or pass/no pass option.

(formerly Music 52abcd)

MUSI 180 - Fundamentals of Electronic Music

2 units

1 hour lecture, 2 hours lab

Credit, degree applicable

Transfer CSU

This course provides instruction in the use of synthesizers, Musical Instrument Digital Interface (MIDI), computers, musical acoustics, sound design, and music software. Emphasis is placed on technical, compositional, multimedia technology, and performance skills utilizing digital synthesizers in conjunction with computers and music software applications.

(formerly Music 80abc)

MUSI 181A - Introduction to Electronic Music Studio

2 units

1 hour lecture, 2 hours lab

Credit, degree applicable

Transfer CSU

In this course, students are introduced to audio recording, live sound reinforcement, signal processors, microphones, reference monitors, room acoustics, Musical Instrument Digital Interface (MIDI), computers, synthesizers, and software. Emphasis is placed on the technical and creative utilization of audio equipment in conjunction with the production of audio recordings and live sound reinforcement.

(formerly Music 81A)

MUSI 181B - Electronic Music Studio

2 units

1 hour lecture, 2 hours lab

Prerequisite: MUSI 181A with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

This course is a continuation of MUSI 181A. It further explores the use of audio recording processes, synthesizers, computer hardware and software, and recording equipment.

(formerly Music 81B)

MUSI 182 - Digital Audio Recording for Commercial Music

3 units

2 hours lecture, 3 hours lab

Prerequisite: MUSI 181A with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course provides instruction on the functions and operations of digital music audio recording software such as Pro Tools. Emphasis is placed on recording, editing, and mixing digital audio in both Macintosh and PC computer environments.

(formerly Music 82abc)

MUSI 190A - Applied Music I/Individual Lessons

1 unit

4 hours lab per week to be arranged

Enrollment Limitation: audition

Credit, degree applicable

Transfer CSU

This course, by audition only, provides an introduction to music performance for students serious about pursuing music. Students will develop their technique and skills in music performance through individual weekly lessons, class performances, and structured practice on campus. Attendance is required at selected musical events offered by the El Camino College Center for the Arts and in the community.

MUSI 190B - Applied Music II

1 unit

4 hours lab per week to be arranged

Prerequisite: MUSI 101 or concurrent enrollment AND MUSI 190A

Credit, degree applicable

Transfer CSU

This course for the music major is a recital workshop, which includes an individual weekly lesson. Emphasis is placed on developing technique and musicianship through class performances and structured practice on campus. Attendance is required at selected musical events offered by the El Camino College Center for the Arts and in the community.

MUSI 190C - Applied Music III

1 unit

4 hours lab per week to be arranged

Prerequisite: MUSI 103A or concurrent enrollment and MUSI 190B

Credit, degree applicable

Transfer CSU

This course for the continuing music major is a recital workshop emphasizing performance techniques and the development of intermediate level repertoire. Emphasis is placed on developing musicianship through class performances, structured practice on campus, and individual lessons. Attendance is required at selected musical events offered by the El Camino College Center for the Arts and in the community.

MUSI 190D - Applied Music IV

1 unit

4 hours lab per week to be arranged

Prerequisite: MUSI 103B or concurrent enrollment and MUSI 190C and MUSI 215A or concurrent enrollment MUSI 215B or concurrent enrollment

Credit, degree applicable

Transfer CSU

This course for the continuing music major is a recital workshop emphasizing performance techniques, historical performance practices, and the development of advanced level repertoire. Students will develop musicianship through class performances, structured practice on campus, and individual lessons. Attendance is required at selected musical events offered by the El Camino College Center for the Arts and in the community.

MUSI 203 - Theory and Musicianship III

4 units

5 hours lecture

Prerequisite: MUSI 103B with a minimum grade of C or equivalent

Recommended Preparation: MUSI 215A or MUSI 215B

Credit, degree applicable

Transfer CSU, UC

This course is a continuation of MUSI 103B and expands the study of tonal music by enlarging the harmonic vocabulary to include the remaining chords. Small form will be reviewed as a precursor to sonata form, and students will study enharmonic modulation, modes, instrumental transposition, and orchestral score reading. Appropriate exercises in sightsinging and dictation will accompany written work.

(formerly Music 3C)

MUSI 215A - Music History and Literature up to 1750

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course focuses on the major stylistic periods of music up to 1750. The evolution of Western art music from the time of ancient Greece and Rome until the end of the Baroque era will be presented in context with contemporaneous social, political, and artistic movements and events.

(formerly Music 15A)

MUSI 215B - Music History and Literature - 1750 to Present

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course focuses on the major stylistic periods of music from 1750 to 2000. The evolution of Western art music from the end of the Baroque era until the end of the 20th century will be presented in context with contemporaneous social, political, and artistic movements and events.

(formerly Music 15B)

MUSI 220 - Voice Class II

2 units

2 hours lecture, 1 hour lab

Prerequisite: MUSI 120 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course continues the development of vocal technique, musicianship, style and interpretation, with increased emphasis on repertoire development. Attendance at selected musical events offered by the El Camino College Center for the Arts is required.

(formerly Music 19abcd)

MUSI 221 - Introduction to Lyric Diction for Singers

2 units

2 hours lecture, 2 hours lab

Prerequisite: MUSI 120 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course is designed for the study of diction and vocal production techniques as they apply specifically to the singer. Italian, Spanish, French, and German will be studied using phonetic diction, in preparation for the accurate vocal performance of these languages.

MUSI 222abcd - Opera Workshop

2 units

1 hour lecture, 3 hours lab

Enrollment Limitation: audition Prepare and perform a solo selection from memory and demonstrate the ability to read music at a beginning level.

Credit, degree applicable

Transfer CSU

This course develops vocal, musical, and dramatic skills through the research, rehearsal, and performance of selected works and scenes from the standard operatic literature.

Note: This course is repeatable.

(formerly Music 222)

MUSI 231A - Intermediate Piano I

2 units

2 hours lecture, 1 hour lab

Prerequisite: MUSI 131B with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC

This course continues the development of musical, technical and functional skills using selected intermediate repertoire representative of the stylistic periods. Attendance at specified musical events at the El Camino College Center for the Arts is required.

(formerly Music 31C)

MUSI 231B - Intermediate Piano II

2 units

2 hours lecture, 1 hour lab

Prerequisite: MUSI 231A with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC

This course continues the development of musical, technical and functional skills using selected intermediate and intermediate/advanced repertoire representative of the style periods, the Baroque, Classic, Romantic and Contemporary. Attendance at specified musical events at the El Camino College Center for the Arts and in the community is required.

(formerly Music 31D)

MUSI 232 - Advanced Piano

2 units

2 hours lecture, 1 hour lab

Prerequisite: MUSI 231B with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC

This course continues the development of musical, technical and functional skills using selected advanced repertoire representative of the style periods, the Baroque, Classic, Romantic, and Contemporary. Attendance at specified musical events at El Camino College Center for the Arts is required.

(formerly Music 32abcd)

MUSI 247 - Intermediate Guitar

2 units

2 hours lecture, 1 hour lab

Prerequisite: MUSI 147A with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC

This course is designed to explore guitar playing with a more focused approach. This course aims to provide the student with enough tools to continue study at a more stylistically-focused level upon completion. Students will be introduced to more advanced melody reading, moveable chord and scale types, advanced rhythm and strumming patterns, songwriting techniques, and improvisation.

(formerly Music 48abcd)

MUSI 253abcd - Chorale

2 units

5 hours lecture

Enrollment Limitation: Audition during the first week of class. The student needs to have the ability to sing a harmony part.

Recommended Preparation: previous choral experience

Credit, degree applicable

Transfer CSU, UC

This course provides an opportunity to participate in a small (30 voice) chamber chorale ensemble. Choral literature of all styles will be performed including folk songs and show tunes. Singers in this ensemble will perform on campus and in the community as well as on concert tours. Note: Letter grade or pass/no pass option.

(formerly Music 53abcd)

MUSI 257abcd - Women's Chorus

1 unit

4 hours lab per week to be arranged

Enrollment Limitation: audition

Credit, degree applicable

Transfer CSU, UC

This course provides an opportunity to participate in a women's choral ensemble. Choral literature of all styles composed or arranged for women's voices will be performed. Singers in this ensemble will perform at the conclusion of each semester. Note: Letter grade or pass/no pass option.

(formerly Music 57abcd)

MUSI 258abcd - Vocal Jazz Ensemble

1 unit

4 hours lab per week to be arranged

Enrollment Limitation: Audition, Band/Orchestra

Credit, degree applicable

This course focuses on the rehearsal and performance of traditional and contemporary vocal jazz repertoire, accompanied by a small instrumental ensemble. Emphasis is placed on stylistic and historical performance practices, ensemble singing, improvisation, performance technique and musicianship. Performances include on-campus concerts, festivals and at local jazz venues.

MUSI 259abcd - Music Production Workshop

1 unit

3 hours lab per week to be arranged

Enrollment Limitation: audition (students must be able to match pitch and sing a harmony part)

Recommended Preparation: the ability to dance and act

Credit, degree applicable

Transfer CSU, UC

This course provides experience in a musical theatre production as a member of the chorus or as a soloist. Students will participate in the Kennedy Center American College Theater Festival (KCACTF) competition.

(formerly Music 20abcd)

MUSI 260abcd - Woodwind Ensembles

1 unit

2 hours lecture

Enrollment Limitation: audition (previous band or orchestra experience or ability to perform music of moderate difficulty on a standard woodwind instrument)

Credit, degree applicable

Transfer CSU, UC

These ensembles rehearse and perform literature written for combinations of woodwinds in choirs of like instruments (all flutes, or clarinets, or saxophones) and mixed instruments. The ensembles include trios, quartets, quintets and larger ensembles, and may be combined with non-woodwind instruments to complete the instrumentation appropriate to the selected literature. Performances are held on campus and in the community.

Note: Letter grade or pass/no pass option.
(formerly Music 60abcd)

MUSI 261abcd - Brass Ensembles

1 unit

2 hours lecture

Enrollment Limitation: audition (previous band or orchestra experience or ability to perform music of moderate difficulty on a standard brass instrument)

Credit, degree applicable

Transfer CSU, UC

These ensembles rehearse and perform literature written for combinations of brass instruments. The ensembles include trios, quartets, quintets and larger ensembles, and may be combined with non-brass instruments to complete the instrumentation appropriate to the selected literature. Performances are held on campus and in the community.

Note: Letter grade or pass/no pass option.
(formerly Music 61abcd)

MUSI 262abcd - Percussion Ensembles

1 unit

2 hours lecture

Recommended Preparation: previous band or ensemble experience or ability to perform music of moderate difficulty on percussion instruments

Credit, degree applicable

Transfer CSU, UC

These ensembles rehearse and perform literature written for combinations of melody and/or rhythm percussion instruments. The ensembles include trios, quartets, quintets and larger ensembles, and may be combined with wind or string instruments to complete the instrumentation appropriate to the selected literature. Performances are held on campus and in the community.

Note: Letter grade or pass/no pass option.
(formerly Music 62abcd)

MUSI 264abcd - String Ensembles

1 unit

2 hours lecture

Enrollment Limitation: audition (previous orchestra or ensemble experience or ability to perform music of moderate difficulty on a standard string instrument)

Credit, degree applicable

Transfer CSU, UC

These ensembles rehearse and perform literature written for combinations of string instruments. The ensembles include trios, quartets, quintets, and larger ensembles, and may be combined with non-string instruments to complete the instrumentation appropriate to the selected literature. Performances are held on campus and in the community.

Note: Letter grade or pass/no pass option.
(formerly Music 63abcd)

MUSI 265abcd - Symphonic Band

1 unit

4 hours lab per week to be arranged

Enrollment Limitation: some high school band or orchestra experience or ability to perform music of moderate difficulty on standard band instrument

Credit, degree applicable

Transfer CSU, UC

This ensemble studies and performs compositions of moderate difficulty from the standard wind band repertoire. Emphasis is placed on stylistic and historical performance practices, playing techniques, and musicianship. Concerts are performed on and off campus.

Note: Letter grade or pass/no pass option.

(formerly Music 64abcd)

MUSI 266abcd - Studio Jazz Band

1 unit

4 hours lab per week to be arranged

Enrollment Limitation: audition

Credit, degree applicable

Transfer CSU, UC

This intermediate ensemble rehearses and performs commercial big band music from the swing era. The literature includes works by composers such as Ellington, Basie, and Kenton, as well as opportunities for vocal jazz soloists. Emphasis is placed on section development, extended solos, and improvisation. Performances are held on campus and in the community.

Note: Letter grade or pass/no pass option.

(formerly Music 67abcd)

MUSI 267abcd - Concert Jazz Band

1 unit

4 hours lab per week to be arranged

Enrollment Limitation: audition

Credit, degree applicable

Transfer CSU, UC

This advanced ensemble rehearses and performs a variety of music from the swing era to contemporary jazz written for the large standard jazz band instrumentation. Emphasis is placed on section development, improvisation, extended solos, and literature that is original and of increasing difficulty. Performances include campus concerts, as well as at local schools and in jazz festivals.

Note: Letter grade or pass/no pass option.

(formerly Music 68abcd)

MUSI 268abcd - Symphony Orchestra

1 unit

4 hours lab per week to be arranged

Enrollment Limitation: audition at the first class meeting (ability to perform music of moderate difficulty on a standard orchestral instrument)

Credit, degree applicable

Transfer CSU, UC

This ensemble rehearses and performs classics from the standard symphony orchestra repertoire. Emphasis is placed on stylistic and historical performance practices, playing techniques, and musicianship. Literature includes works for string and full orchestras, as well as solo and choral accompanying. Concerts are performed on and off campus.

Note: Letter grade or pass/no pass option.

(formerly Music 70abcd)

MUSI 269ABCD - Guitar Ensembles

1 unit

2 hours lecture

Recommended Preparation: MUSI 147A AND MUSI 147B

Credit, degree applicable

Transfer CSU, UC

Guitar ensemble is designed for guitarists who read standard musical notation in addition to basic chords. This class will include the rehearsal and performance of guitar ensemble literature from the Renaissance to the present, including music of the Baroque, Classical and Romantic eras, as well as Jazz and Rock styles.

Note: Students must provide their own acoustic or classical guitars

MUSI 284 - Commercial Music Business Studies

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

In this course, students will examine the major components of the music industry. Topics will include publishing, copyrights, and recording/production contracts. Students will analyze industry trends, develop a comprehensive business plan, and explore job opportunities within the industry.

(formerly Music 84)

MUSI 285 - Songwriting for Commercial Music

3 units

2 hours lecture, 3 hours lab

Recommended Preparation: MUSI 101

Credit, degree applicable

Transfer CSU

In this course, students will develop and improve their ability to write songs, lyrics, and melodies through analysis and application of techniques used by professional songwriters. Students will be introduced to contemporary music technology and an overview of the music business as they pertain to songwriting.

(formerly Music 85ab)

MUSI 290 - Advanced Applied Music

1 unit

4 hours lab per week to be arranged

Prerequisite: MUSI 190D and MUSI 203 with a minimum grade of C in prerequisite

Corequisite: MUSI 215A or MUSI 215B

Credit, degree applicable

Transfer CSU, UC

This course for the graduating music major is a recital workshop emphasizing audition techniques and strategies, and the refinement of advanced level repertoire. Students will develop musicianship through class performances, structured practice on campus, and individual lessons. Attendance is required at selected music events offered by the El Camino College Center for the Arts and in the community.

(formerly Music 90abcd)

MUSI 555 - Community Choir for the Older Adult

0 units

4 hours lab per week to be arranged (maximum of 72 hours per semester)

Noncredit

This ensemble for the older adult rehearses and performs traditional and contemporary compositions from the standard choral literature. Emphasis is placed on stylistic and historical performance practices, choral techniques, and musicianship. Performances are combined with the College Community Choir and are held on campus and in the community.

MUSI 560 - Woodwind Ensembles for the Older Adult

0 units

2 hours lecture per week to be arranged (maximum of 36 hours per semester)

Enrollment Limitation: audition (previous band or orchestra experience or ability to perform music of moderate difficulty on a standard orchestral woodwind instrument)

Noncredit

These ensembles for the older adult rehearse and perform literature written for combinations of woodwinds in choirs of like instruments (all flutes or clarinets or saxophones) and mixed instruments. The ensembles include trios, quartets, quintets, and larger ensembles and may be combined with non-woodwind instruments to complete the instrumentation appropriate to the selected literature. Emphasis is placed on stylistic and historical performance practices, instrumental techniques, and musicianship. Performances are held on campus and in the community.

MUSI 561 - Brass Ensembles for the Older Adult

0 units

2 hours lecture per week to be arranged (maximum of 36 hours per semester)

Enrollment Limitation: audition (previous band or orchestra experience or ability to perform music of moderate difficulty on a standard orchestral brass instrument)

Noncredit

These ensembles for the older adult rehearse and perform literature written for combinations of brass instruments. The ensembles include trios, quartets, quintets, and larger ensembles and may be combined with non-brass instruments to complete the instrumentation appropriate to the selected literature. Emphasis is placed on stylistic and historical performance practices, instrumental techniques, and musicianship. Performances are held on campus and in the community.

MUSI 562 - Percussion Ensembles for the Older Adult

0 units

2 hours lecture per week to be arranged (maximum of 36 hours per semester)

Enrollment Limitation: audition (previous band or ensemble experience or ability to perform music of moderate difficulty on percussion instruments)

Noncredit

These ensembles for the older adult rehearse and perform literature written for combinations of melody and/or rhythm percussion instruments. The ensembles include quartets, quintets, sextets, and larger ensembles and may be combined with wind or string instruments to complete the instrumentation appropriate to the selected literature. Emphasis is placed on instrumental techniques, improvisation, and musicianship. Performances are held on campus and in the community.

MUSI 564 - String Ensembles for the Older Adult

0 units

2 hours lecture per week to be arranged (maximum of 36 hours per semester)

Enrollment Limitation: audition (previous orchestra experience or ability to perform music of moderate difficulty on a standard orchestral string instrument)

Noncredit

These ensembles for the older adult rehearse and perform literature written for combinations of string instruments. The ensembles include trios, quartets, quintets, and larger ensembles, and may be combined with non-string instruments to complete the instrumentation appropriate to the selected literature. Emphasis is placed on stylistic and historical performance practices, instrumental techniques, and musicianship. Performances are held on campus and in the community.

(formerly Music 563)

MUSI 565 - Community Band for the Older Adult

0 units

4 hours lab per week to be arranged (maximum of 72 hours per semester)

Enrollment Limitation: previous band or orchestra experience or ability to perform music of moderate difficulty on a standard band instrument

Noncredit

This ensemble for the older adult rehearses and performs traditional and contemporary compositions from the standard wind band literature. Emphasis is placed on stylistic and historical performance practices, instrumental techniques, and musicianship. Performances are combined with the College Community Band and are held on campus and in the community.

MUSI 567 - Jazz Band for the Older Adult

0 units

4 hours lab per week to be arranged (maximum of 72 hours per semester)

Enrollment Limitation: audition (ability to perform music of moderate difficulty on a standard jazz instrument)

Noncredit

This ensemble for the older adult rehearses and performs traditional and contemporary jazz compositions. The literature includes works by composers such as Basie, Ellington, and Nestico, as well as opportunities for vocal jazz soloists. Emphasis is placed on section development, extended solos, and improvisation. Performances are combined with the Jazz Band or Big Band Jazz and are held on campus and in the community.

MUSI 570 - Orchestra for the Older Adult

0 units

4 hours lab per week to be arranged (maximum of 72 hours per semester)

Enrollment Limitation: audition (previous band or orchestra experience or ability to perform music of moderate difficulty on a standard orchestral instrument)

Noncredit

This ensemble for the older adult rehearses and performs classics from the standard symphony orchestra literature including works for string and full ensembles. Emphasis is placed on stylistic and historical performance practices, instrumental techniques, and musicianship. Performances are combined with the Symphony Orchestra and are held on campus and in the community.

NURS 101 - Exploring Health Occupation Careers

2 units

2 hours lecture

Prerequisite: eligibility for ENGL 1A

Credit, degree applicable

This is an introductory course for students considering careers in health care or wishing to become more familiar with the roles of other health care professionals. Students will explore career options and be introduced to the major job responsibilities and technical skill requirements of a variety of health care occupations. The information provided will enable students to match their abilities and interests to a specific health care occupation.

NURS 103 - Nurse Assistant

5 units

6.5 hours lecture, 16 hours lab

Prerequisite: Applicants are required to obtain a complete physical examination, proof of negative Tuberculosis and Measles -Mumps-Rubella (MMR) and receive a Hepatitis B vaccination prior to Orientation Day. Clear background check of no DUI, misdemeanor, or felony convictions

Recommended Preparation: ENGL 84 and MATH 12

Credit, not degree applicable

Transfer CSU

This course prepares the student to function as an entry-level worker on a health care team in a long-term care facility. The focus is on preparing the student to provide direct care to the patient/resident; to promote comfort measures; and collect, record and report data to licensed personnel. Principles of critical thinking, team building, ethics, caring and cultural sensitivity are integrated throughout the course.

NURS 143 - Introduction to Nursing

2 units

2 hours lecture

Prerequisite: ENGL 1A and MATH 37 or equivalent and PSYC 16 or concurrent enrollment with a minimum grade of C in all prerequisites

Credit, degree applicable

Transfer CSU

In this introductory course, students will examine the professional nurse's role and responsibilities in healthcare settings. Students will study the Nursing Program's philosophy which encompasses Maslow's and Kalish's Hierarchy of Human Needs and Watson's Theory of Human Caring. The students will apply and evaluate the impact of the nursing process when researching care of the patient with biophysical health conditions under the four domains of patient care which includes professional nursing, health, illness, and the healthcare environment. Specific emphasis will be placed on application of the nursing process, critical thinking, therapeutic communication, cultural, development, and diversity.

(formerly Nursing 145)

NURS 144 - Dosage Calculations

2 units

1.5 hours lecture, 1.5 hours lab

Prerequisite: MATH 73 or equivalent and NURS 143 or concurrent enrollment with a minimum grade of C in all prerequisites
Credit, degree applicable
Transfer CSU

This course is designed to help students develop the necessary skills to calculate accurate and safe medication dosages. Advanced problem solving, application of algebraic concepts, formulas, proportional relationships, system of measurement, and measurement system conversions will be incorporated. Designated lab time will include clinical scenarios involving correct medication formulas and calculations, the selection of correct medical equipment to prepare and administer various types of medication, careful reading and interpretation of sample medication orders, and evaluation of medication labels for safe administration.

(formerly Nursing 48)

NURS 146 - Health Assessment

2 units

1.5 hours lecture, 1.5 hours lab

Prerequisite: ANAT 32 and PHYS 31 or Anatomy and Physiology 34A and Anatomy and Physiology 34B and Microbiology 33 and MEDT 1 and NURS 143 and NURS 144 with a minimum grade of C in all prerequisites
Credit, degree applicable
Transfer CSU

This course will help students develop and utilize physical assessment and historytaking skills necessary to care for the biophysical needs of patients. The course focuses on the communication techniques and critical thinking skills necessary to elicit a health history. (Concepts of patient, professional nursing, health and illness, and the healthcare environment will be introduced.) Physical assessment skills will be developed to determine normal and abnormal findings of various body systems, including a general survey assessment.

(formerly Nursing 155)

NURS 149 - Advanced Placement in Nursing

2.5 units

2 hours lecture, 1.5 hours lab

Prerequisite: NURS 144 and NURS 146 and MEDT 1 with a minimum grade of C in prerequisites

Enrollment Limitation: Students must be admitted into the Nursing Program and students must have completed the Readiness Assessment Test - ATI Test of Essential Academic Skills (ATI-TEAS) with the state recommended passing score.

Credit, degree applicable
Transfer CSU

This course introduces the Licensed Vocational/Practical Nurses (LVN/LPN) and transfer students from accredited nursing programs to concepts of nursing as they apply to the El Camino College Nursing Program. Students will become familiar with the four domains of care which include patient, professional nursing, health and illness, and the healthcare environment. Emphasis will be on the role of the nurse as it relates to professional identity and caregiving. Core competencies will include communication, safety, critical thinking, and evidence-based practice. Course discussion will focus on transitioning to the professional nursing role and the impact of legal and ethical boundaries on health care delivery. Students will practice and demonstrate competency in basic nursing skills.

NURS 150A - Beginning Nursing Process and Fundamental Skills I

4 units

5 hours lecture, 9 hours lab to be arranged (9 week course)

Enrollment Limitation: admission to the Nursing Program
Credit, degree applicable
Transfer CSU

In this course, students gain the skills and knowledge necessary to provide basic nursing care to the individual and family. Concepts of basic human needs and structural variables such as age, sex, and ethnicity are studied. Select psychomotor skills such as dressing changes and medication administration are practiced in the skills and simulation labs in preparation for clinical practice.

NURS 150B - Beginning Nursing Process and Fundamental Skills II

3.5 units

3 hours lecture, 12 hours lab to be arranged (9 week course)

Prerequisite: NURS 150A with a minimum grade of C

Credit, degree applicable

Transfer CSU

In this course, students will focus on the skills and knowledge needed to assess and care for a patient in the hospital setting. Emphasis will be placed on the nursing process, therapeutic communication, and providing basic care to the individual. Fundamental nursing skills such as medication administration will be carried out in the clinical setting. Particular emphasis will be placed on caring for the geriatric population. The nurse's ethical and legal responsibilities of patient care within the hospital setting will also be addressed.

NURS 151 - Human Development and Health

2 units

2 hours lecture

Enrollment Limitation: admission to the Nursing Program

Credit, degree applicable

Transfer CSU

This course is designed for nursing students to explore the impact of biopsychosocial growth and development principles from conception through death. The emphasis is on analyzing the impact of these principles on health. The nurse's role in applying this knowledge throughout the life span is explored through community observations and interview. Variables that influence health such as culture, family, and individual dynamics are examined and analyzed. This course sets the groundwork for initial clinical practice.

NURS 152 - Introduction to Nursing Pharmacology

1 unit

1 hour lecture

Prerequisite: NURS 150A or NURS 151 with a minimum grade of C in prerequisite

Credit, degree applicable

Transfer CSU

This course is an introduction to clinical drug therapy. Major content areas include fundamental concepts of pharmacology; groups of therapeutic drugs; prototypes of drug groups; commonly prescribed individual drugs; interrelationships between body systems and drugs; and the role of the nursing process in prescribed drug therapy regimens. Legal and ethical implications will be examined.

NURS 153 - Intermediate Nursing Process I

4.5 units

2 hours lecture, 7.5 hours lab

Prerequisite: NURS 150B and NURS 151 and NURS 152 with a minimum grade of C in prerequisite

Credit, degree applicable

Transfer CSU

This course will assist the student to meet the needs of adult patients with moderately severe disease states. Theory and utilization of the nursing process will focus on pathophysiological problems associated with the preoperative and postoperative periods. Students will examine problems associated with physical integrity, respiratory, activity-rest, ingestive, excretory, and sexuality needs.

NURS 154 - Intermediate Nursing Process and Mental Health

4 units

2 hours lecture, 6 hours lab per week to be arranged

Prerequisite: NURS 150B, NURS 151 and NURS 152 with a minimum grade of C in prerequisite

Credit, degree applicable

Transfer CSU

In this course, students will utilize the nursing process in caring for clients with varying degrees of mental health problems. Psychopharmacological therapies will be examined. Students will apply techniques of therapeutic communication, administer medications, and assume a leadership role in the clinical setting. In addition, students will utilize and maintain legal and ethical standards specific to mental health clients.

NURS 156 - Advanced Nursing Pharmacology

1 unit

1 hour lecture

Prerequisite: NURS 151 and NURS 152 with a minimum grade of C in prerequisite

Credit, degree applicable

Transfer CSU

This course offers an in-depth study of clinical drug therapy. The knowledge and intervention needed to maximize therapeutic effects and prevent or minimize adverse effects of drugs will be emphasized. Major content areas will include advanced pharmacological principles; major drug classifications; selected individual drugs; drug effects on body tissues; human responses to drug therapy; and application of the nursing process. Anatomy, physiology, and microbiology concepts are correlated with various pathologies, emphasizing the effect(s) of drug therapy on body systems. Health teaching and legal and ethical issues are examined.

NURS 210 - Implications of Pathophysiology Concepts for Nurses

2 units

2 hours lecture

Prerequisite: NURS 153 with a minimum grade of C or licensed Registered Nurse or Vocational Nurse

Credit, degree applicable

Transfer CSU

In this course, the student will deepen their understanding of pathophysiology and the progressive effects of disease on the human body. Common single and multi-system disorders will be used to illustrate clinical relationships among the knowledge of pathophysiology, patient assessment, diagnostics, and management of care.

NURS 220 - Nursing Fundamentals

3.5 units

2 hours lecture, 4.5 hours lab

Prerequisite: NURS 143 and NURS 144 and NURS 146 and MEDT 1 with a minimum grade of C in all prerequisites

Enrollment Limitation: Students must be admitted into the Nursing Program and students must have completed the Readiness Assessment Test - ATI Test of Essential Academic Skills (ATI-TEAS) with the state recommended passing score.

Credit, degree applicable

Transfer CSU

This course introduces students to concepts related to the four domains of care which include the patient, professional nursing, health, and illness. The course further examines the nursing process as the foundation of nursing practice and emphasizes the delivery of care based on Maslow's and Kalish's Hierarchy of Human Needs and Watson's Model of Caring. Emphasis will be placed on the concepts of infection, thermoregulation, pain, tissue integrity, gas exchange, perfusion, safety, nutrition, elimination, mobility, sleep, culture, spirituality, caregiving, and the health care system. The student will gain a conceptual understanding of principles and be able to apply them in all areas of nursing practice.

NURS 222 - Medical Surgical Nursing - Older Adult

3.5 units

2 hours lecture, 4.5 hours lab

Prerequisite: NURS 220 with a minimum grade of C

Enrollment Limitation: Students must be admitted into the Nursing Program.

Credit, degree applicable

Transfer CSU

In this course, students will gain skills to assess and care for patients in the hospital setting. Emphasis will be placed on the care of the older adult population and includes critical thinking, legal and ethical issues within the nursing profession. Concepts include hormonal regulation, glucose regulation, perfusion, pain, communication, safety, functional ability, family dynamics, self-management and health promotion, intracranial regulation, cognition, interpersonal violence, ethics, health care law, sensory perception, mobility, and tissue integrity.

NURS 224 - Nursing Pharmacology

3 units

3 hours lecture

Prerequisite: NURS 143 and NURS 144 and NURS 146 and MEDT 1 with a minimum grade of C in all prerequisites

Enrollment Limitation: Students must be admitted into the Nursing Program.

Credit, degree applicable

Transfer CSU

This course provides instruction from basic to advanced concepts and principles of pharmacology for nursing students. The knowledge and intervention needed to maximize therapeutic effects and prevent or minimize adverse effects of drugs will be emphasized. Major content areas will include advanced pharmacological principles, major drug classification, selected individual drugs, drug effects on body tissues, human responses to drug therapy, and the application of the nursing process. Anatomy, physiology, and microbiology concepts will be correlated with various pathologies, emphasizing the effects of drug therapy on body systems. Students will learn how to develop and present patient teaching plans. Legal and ethical issues will also be discussed.

NURS 226 - Nursing Skills Practicum I

.5 unit

1.5 hours lab

Prerequisite: NURS 143 and NURS 144 and NURS 146 and MEDT 1 with a minimum grade of C in all prerequisites

Enrollment Limitation: Students must be admitted into the Nursing Program and students must have completed the readiness Assessment Test ATI Test of Essential Academic Skills (ATI-TEAS) with the state recommended passing score.

Credit, degree applicable

Transfer CSU

In this course, students will apply theoretical concepts and practice skills to maintain and promote the four domains of care which includes the patient, professional nursing, health, illness, and the healthcare environment. Students will use the appropriate equipment and gain skill competency by practicing basic nursing skills in the skills lab. Competencies, as they relate to physical assessment, parenteral medication administration, wet-to-moist dressing change, nasogastric tube insertion, feeding and removal, and gastrostomy or jejunostomy feeding will be assessed. Emphasis will be placed on hands-on practice based on the following nursing concepts: medical and surgical asepsis, physical hygiene, vital signs, oxygenation, nutrition, body mechanics, elimination, and medication administration.

NURS 230 - Mental Health Nursing

3.5 units

2 hours lecture, 4.5 hours lab

Prerequisite: NURS 220 and NURS 222 and NURS 224 and NURS 226 with a minimum grade of C

Enrollment Limitation: Students must be admitted into the Nursing Program.

Credit, degree applicable

Transfer CSU

In this course, students will utilize the nursing process to care for clients with varying degrees of mental health problems. Psychopharmacological therapies will be examined. Students will apply techniques of therapeutic communication and assume a leadership role in the clinical setting. In addition, students will utilize and maintain legal and ethical standards specific to mental health patients.

NURS 232 - Obstetrical Patients and the Newborn

2.5 units

1.5 hours lab, 3 hours lecture

Prerequisite: NURS 220 and NURS 222 and NURS 224 and NURS 226 with a minimum grade of C

Enrollment Limitation: Students must be admitted into the Nursing Program.

Credit, degree applicable

Transfer CSU

This course focuses on the theory and practical application of concepts related to obstetrical patients and the newborn. The nursing process will be utilized as the foundation of study and emphasis will be placed on the concepts of reproduction, health promotion, self-management, infection, technology and informatics, thermoregulation, perfusion, human sexuality, nutrition culture, and social/ethical aspects. The student will gain a conceptual understanding of principles in all areas specific to the obstetrical patient and the newborn.

NURS 234 - Pediatric Nursing

2.5 units

1.5 hours lecture, 3 hours lab

Prerequisite: NURS 220 and NURS 222 and NURS 224 and NURS 226 with a minimum grade of C

Enrollment Limitation: Students must be admitted into the Nursing Program.

Credit, degree applicable

Transfer CSU

This course focuses on the theory and clinical application of concepts related to the nursing care of children and their families by emphasizing the holistic care of the child that include the developmental, physiological, psychosocial, cultural, and spiritual care of the child within the family unit. Health care concepts discussed in this course will include family dynamic development and functional abilities related to care of the child. Professional nursing concepts including clinical judgement, communication, ethical-legal, evidenced-based practice, health promotion, informatics, patient education, professionalism, safety, and collaboration will also be presented. The student will gain a conceptual understanding of principles and apply them in all areas specific to the pediatric patient.

NURS 238 - Nursing Skills Practicum II

.5 unit

1.5 hours lab

Prerequisite: NURS 220 and NURS 222 and NURS 224 and NURS 226 with a minimum grade of C

Enrollment Limitation: Students must be admitted into the Nursing Program.

Credit, degree applicable

Transfer CSU

In this course, students will develop mastery of basic care principles and complex nursing skills to include the following nursing concepts; medical and surgical asepsis, physical hygiene, vital signs, oxygenation, nutrition, body mechanics, elimination, fluid and electrolyte, acid-base balance and medication administration. Students will utilize the appropriate equipment and gain skill competency by practicing basic nursing skills in the skills lab. The nursing skills practicum course will assess the student's competencies, as they relate to physical assessment; urinary elimination, venipuncture, infusion pump and volitol management, and glucose regulation.

NURS 240 - Intermediate Medical-Surgical Nursing I

4 units

2 hours lecture, 6 hours lab

Prerequisite: NURS 230 and NURS 232 and NURS 234 and NURS 238 with a minimum grade of C

Enrollment Limitation: Students must be admitted into the Nursing Program.

Credit, degree applicable

Transfer CSU

In this course, students are introduced to adult patients with moderate to severe disease states. Theory and clinical practice will focus on the biophysical concepts in medical-surgical conditions. Students will examine problems associated with tissue integrity, nutrition, inflammation, perfusion, acid-base balance, fluid and electrolytes, elimination, hormonal and glucose regulation, functional ability, safety, sexuality, and self-management.

NURS 242 - Intermediate Medical-Surgical Nursing II

4 units

2 hours lecture, 6 hours lab

Prerequisite: NURS 230 and NURS 232 and NURS 234 and NURS 238 with a minimum grade of C

Enrollment Limitation: Students must be admitted into the Nursing Program.

Credit, degree applicable

Transfer CSU

In this course, students will learn about therapeutic care for patients with moderate to severe disease states by utilizing the nursing process, biophysical and medical/surgical concepts. Emphasis will be placed on the role of nurse as patient advocate and manager of care in the clinical setting.

NURS 244 - Nursing Skills Practicum III

.5 units

1.5 hours lab

Prerequisite: NURS 230 and NURS 232 and NURS 234 and NURS 238 with a minimum grade of C

Enrollment Limitation: Students must be admitted into the Nursing Program.

Credit, degree applicable

Transfer CSU

In this course, students will apply persistent hands-on practice in the skills lab. They will assimilate mastery of the basic to complex nursing skills based on following nursing concepts: medical and surgical asepsis, physical hygiene, vital signs, nutrition, body mechanics, elimination, fluid and electrolyte, acid-base balance and medication administration. Students will use the appropriate equipment and gain skill competency by practicing basic nursing skills in a safe, supportive and supervised environment in the on-campus skills lab. The student's competency as it relates to physical assessment, administration of blood products, venipuncture of all variation, and oxygenation will be assessed.

NURS 247 - Advanced Medical-Surgical Nursing I

6 units

3 hours lecture, 9 hours lab

Prerequisite: NURS 240 and NURS 242 and NURS 244 with a minimum grade of C

Enrollment Limitation: Students must be admitted into the Nursing Program.

Credit, degree applicable

Transfer CSU

In this course, students will explore biophysical concepts, knowledge of the critically ill patient across the life span and promoting wellness in culturally diverse populations and nursing management essential to the care of acute/chronic, critical, and emergency nursing. Clinical practice of critical care nursing will occur in a variety of settings.

NURS 248 - Advanced Medical-Surgical Nursing II Preceptorship

2 units

6 hours lab

Prerequisite: NURS 240 and NURS 242 and NURS 244 and NURS 247 with a minimum grade of C

Enrollment Limitation: Students must be admitted into the Nursing Program.

Credit, degree applicable

Transfer CSU

This preceptorship course provides the nursing student, enrolled in their last semester of nursing school, an opportunity to work directly with a RN preceptor. This experience allows students to apply knowledge and skills gained throughout the nursing program. The experience assists the student in making a smooth transition from the learner role to the entry-level registered nurses role in a realistic clinical setting. Opportunities to implement leadership and management skills as well as decision-making and priority setting utilizing legal and ethical principles will be provided.

NURS 250 - Intermediate Nursing Process and the Family

5.5 units

3 hours lecture, 7.5 hours lab per week to be arranged

Prerequisite: NURS 153, NURS 154, NURS 146 and NURS 156 with a minimum grade of C in prerequisite

Transfer CSU

This course focuses on the theory and clinical application of concepts related to the nursing care of families in the childbearing and childrearing stages. Using the nursing process, students will apply the El Camino College Nursing Program's theoretical framework to meet the basic needs of families as they move through the life stages of pregnancy, birth, and childhood. The importance of structural variables, physical assessment skills specific to maternal-child nursing, and pathological conditions that occur during childbirth, infancy, childhood, and adolescence will be emphasized.

NURS 251 - Legal and Ethical Considerations in Nursing

1 unit

1 hour lecture

Prerequisite: NURS 153, NURS 154, NURS 146 and NURS 156 with a minimum grade of C in prerequisite

Credit, degree applicable

Transfer CSU

In this course, students will analyze the legal responsibilities associated with the scope of nursing practice as defined by the Board of Registered Nursing. Other parameters and standards of law impacting the nursing profession will be examined. Scenarios that pose ethical dilemmas for the registered nurse will be debated using ethical theories and principles.

NURS 253 - Intermediate Nursing Process II

4.5 units

2 hours lecture, 7.5 hours lab per week to be arranged

Prerequisite: NURS 153, NURS 154, NURS 146 and NURS 156 with a minimum grade of C in prerequisite

Credit, degree applicable

Transfer CSU

This course will assist the student in meeting the needs of clients with complicated disease states. The synthesis and integration of multiple assessment data in order to utilize the nursing process in caring for medical-surgical clients will be emphasized. Organization and prioritizing care for multiple clients will be stressed in the delivery of total patient care. Increased skill development of nursing procedures and collaborative nursing interventions will be emphasized in the clinical setting. Topics will include pain management, hematology, immunology, infectious diseases, oncology, palliation, and neurological dysfunctions.

NURS 254 - Advanced Nursing Process I

7 units

3 hours lecture, 12 hours lab per week to be arranged

Prerequisite: NURS 250, NURS 251, and NURS 253 with a minimum grade of C in prerequisite or equivalent

Credit, degree applicable

Transfer CSU

This course focuses on pathophysiologic concepts and nursing management essential to critical care and emergency nursing. Patients with acute and chronic cardiopulmonary, hepatic, renal, and multi-system dysfunction will be selected for critical care clinical experiences. Leadership and management skills are introduced and applied in the clinical setting. Students apply the nursing process and prioritize nursing care for a group of patients with multiple needs imbalances. The role of the nurse in the management of patient care following a disaster is presented and students participate in an actual disaster drill in a local hospital.

NURS 255 - Advanced Nursing Process II - Clinical Preceptorship

2.5 units

135 hours of lab to be arranged over four weeks

Prerequisite: NURS 254 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

This course will provide a clinical preceptorship experience for the advanced student nurse and the inactive Registered Nurse (RN) as well as the foreign Registered Nurse (RN) in transition. The student works under the supervision of a clinical nurse preceptor. This experience assists the student to make a smooth transition from the learner role to the entry level Registered Nurse role in a realistic clinical setting. Opportunities will be provided to implement leadership and management skills as well as decision making and priority setting utilizing legal and ethical principles.

NFOO 11 - Nutrition

3 units

3 hours lecture

Recommended Preparation: ENGL A

Credit, degree applicable

Transfer CSU, UC

This course is an introduction to the basic principles of nutrition as they relate to the health and physical wellness of individuals. The topics covered include macronutrients, micronutrients, diet and health, weight management, dietary analysis, current nutrition trends, food safety, and physical fitness.

NFOO 15 - Nutrition for Infants and Young Children

3 units

3 hours lecture

Recommended Preparation: ENGL A

Credit, degree applicable

Transfer CSU

In this course, students study the nutrient needs of children from conception through puberty. Topics include nutrient sources and functions, energy balance, assessment of food intake according to current guidelines and standards, food safety and sanitation, policies and practices for child care food programs including public resources, menu planning, and integration of nutrition education into early childhood education programs.

NFOO 99 - Independent Study

1-3 units

hours to be arranged

Enrollment Limitation: two courses in Nutrition and Foods courses with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work

Credit, degree applicable

Transfer CSU*

This course provides special advanced studies in a subject field of Nutrition and Foods not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Nutrition and Foods projects (54 hours per unit).

Note: *Transfer limitations apply. For eligibility requirements, go to www.elcamino.edu/admissions/credit.asp (formerly Nutrition and Foods 99abc)

OCEA 10 - Introduction to Oceanography

4 units

3 hours lecture, 3 hours lab

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This introductory course in oceanography presents the ocean in terms of its physical, chemical and biological environments. The topics include studies of: formation and modification of various wave types; tidal behavior; formation of water masses and ocean currents; beaches and the changing shoreline; coral reefs; physical and chemical properties of ocean water; marine environments; marine sediments; origin of sea floor and coastline features; the spreading sea floor and drifting continents.

OCEA 10H - Honors Introduction to Oceanography

4 units

3 hours lecture, 3 hours lab

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This honors course, intended for students in the Honors Transfer Program, presents the ocean in terms of its physical, chemical and biological environments. The topics include studies of: formation and modification of various wave types; tidal behavior; formation of water masses and ocean currents; beaches and changing shoreline; coral reefs; physical and chemical properties of ocean water; marine environments; marine sediments; origin of sea floor and coastline features; the spreading sea floor and drifting continents. This course is enriched through additional and more vigorous reading, writing, and research assignments.

Note: Students may take either OCEA 10 or Oceanography 10H. Duplicate credit will not be awarded for OCEA 10 and Oceanography 10H.

PARA 1 - Introduction to Paralegal Studies

3 units

3 hours lecture

Recommended Preparation: ENGL 84 and ENGL A

Credit, degree applicable

Transfer CSU

In this course, the student will concentrate on the background and requirements of the paralegal. Included will be the expanded use of paralegals, basic qualifications, training, nature of the work, and career considerations. Topics include the American Legal System, methods of finding and interpreting the law, basic legal concepts and legal terminology, and legal procedures of litigation, mediation, and other non-judicial settlements. Organization and management of the law office are included with an emphasis on ethics for the lawyer and the paralegal. Resumes, interviewing skills, and demeanor in the law office are also discussed.

PHIL 101 - Introduction to Philosophy

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course introduces philosophical ideas and methods concerning knowledge, reality and values. Expected topics will include the sources and limits of knowledge, and the nature of reality. Other topics that may be examined from a philosophical perspective include the nature of the self, religion, science, language, beauty and art, political theory, or mind.

(formerly Philosophy 2)

PHIL 101H - Honors Introduction to Philosophy

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This honors course, intended for students in the Honors Transfer Program, introduces philosophical ideas and methods concerning knowledge, reality and values. Expected topics will include the sources and limits of knowledge, and the nature of reality. Other topics that may be examined from a philosophical perspective include the nature of the self, religion, science, language, beauty and art, political theory, or mind. This course is enriched through extensive, rigorous reading, writing, and research assignments.

Note: Students may take either PHIL 101 or Philosophy 101H. Duplicate credit will not be awarded.

PHIL 103 - Ethics and Society

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course offers a critical study of the major ethical theories and their application to contemporary moral issues, such as abortion, the death penalty, poverty, war, and euthanasia.

(formerly Philosophy 3)

PHIL 105 - Critical Thinking and Discourse

3 units

3 hours lecture

Prerequisite: ENGL 1A with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course focuses on the study and development of critical reasoning and effective argumentation. Emphasis is placed on the application of critical thinking skills to the production of clear, well-argued position and advocacy papers and to the linguistic and logical analysis of the writings of others. Students' papers and other writings will total a minimum of 6,000-8,000 words.

(formerly Philosophy 5)

PHIL 105H - Honors Critical Thinking and Discourse

3 units

3 hours lecture

Prerequisite: ENGL 1A or ENGL 1AH with a minimum grade of C

Credit, degree applicable

Transfer CSU

This honors course, intended for students in the Honors Transfer Program, focuses on the study and development of critical reasoning and effective argumentation. Emphasis is placed on the application of critical thinking skills to the production of clear, well-argued position and advocacy papers and to the linguistic and logical analysis of the writings of others. Students' papers and other writings will total a minimum of 6,000-8,000 words. This course is enriched through extensive rigorous reading, writing, and research assignments.

Note: Students may take either PHIL 105 or Philosophy 105H. Duplicate credit will not be awarded.

PHIL 106 - Introduction to Symbolic Logic

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course focuses on the representation of arguments for formal analysis, and the skills and techniques needed to do so effectively. The focus will be on the basic elements of classical and propositional logic with a brief introduction to predicate logic. Also discussed will be informal fallacies, inductive logic, and language.

(formerly Philosophy 8)

PHIL 107 - Philosophy of Religion

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course is an introduction to traditional philosophical problems connected with religious belief. Issues to be discussed are the existence and nature of God the problems of evil the nature of religious language the existence of miracles religious experience and mysticism. The rationality of religious belief will also be examined.

(formerly Philosophy 7)

PHIL 111 - History of Ancient and Medieval Philosophy

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course offers a chronological examination of Western philosophical thought developed between 600 B.C.E. and 1300 C.E., including the principle ancient and medieval philosophies of this time period. Topics include Greek and Roman thought, and the rise and development of Christianity.

(formerly Philosophy 10)

PHIL 112 - History of Modern Philosophy

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course addresses 16th through 18th century Western philosophy with an emphasis on broad epistemological and metaphysical developments in philosophical thought from Descartes to Kant, and may include some precursors and successors. Some of the concepts explored include empiricism, rationalism, idealism, the limits of knowledge, skepticism, the nature of reality, and arguments for and against the existence of God.

PHIL 113 - Contemporary Philosophy

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course addresses the main themes and ideas of 19th and 20th century philosophy. In addition to major contributions in the philosophy of language and ethics, some of the major philosophical movements covered include existentialism, phenomenology, analytic philosophy and logical positivism, pragmatism, plus post-modernism and post-structuralism.

PHIL 114 - Asian Philosophy

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course examines the central concerns, historic contexts and foundational themes of the diverse philosophical traditions of South and East Asia, including Confucianism, Taoism, Hinduism, Buddhism and Shintoism. Although some attention is given to Western ideas to which Asian thinkers have responded, the main emphasis is given to the different kinds of questions that have engaged Asian thinkers.

(formerly Philosophy 14)

PHIL 115 - Existentialism

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course will examine the philosophical thought of the two strands of existentialist writers: the religious existentialists such as Kierkegaard, Dostoevsky, and Heidegger, and the atheistic existentialists such as Nietzsche, Camus, and Sartre. Issues that will be examined include authenticity, free will, responsibility for one's character and actions, the essence, possibilities and limits of human beings, and the meaning of life.

(formerly Philosophy 12)

PHIL 117 - Political Philosophy

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

In this course, students will examine political theory as presented in the primary works of major Western thinkers from Plato to Marx. Fundamental issues to be explored include human nature, justice, power, the role of the state, and the legitimate scope of government.

Note: Philosophy 117 is the same course as POLI 7.
(formerly Philosophy 17)

PHIL 120 - Ethics, Law and Society

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

In this course, the relationship between the various facets of moral and legal thinking is analyzed. Philosophical issues such as justification for the legal enforcement of morality, the legitimacy of an international system of law, the relationship between new technologies and the role of law are examined. The concepts of individual and international rights and obligations will be discussed.

(formerly Philosophy 23)

PHOT 99 - Independent Study

1-3 units

hours to be arranged

Enrollment Limitation: two courses in Photography with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work

Credit, degree applicable

Transfer CSU*

This course provides special advanced studies in a subject field of Photography not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Photography projects (54 hours per unit).

Note: For eligibility requirements, go to www.elcamino.edu/admissions/credit.asp
(formerly Photography 99abc)

PHOT 101 - Elementary Photography

2 units

1 hour lecture, 3 hours lab

Credit, degree applicable

Transfer CSU, UC*

This course is an introduction to black and white photography. Instruction emphasizes camera operation and exposure settings, processing and developing, enlarging and printing, and lighting and mounting. Also covered is the critical analysis of the aesthetic and technical merits of photographs.

Note: *This course satisfies the photography requirement for students majoring in journalism. The maximum UC credit allowed for students completing Photography 101 and PHOT 102 is one course.
(formerly Photography 51)

PHOT 102 - Basic Photography

3 units

2 hours lecture, 3 hours lab

Prerequisite: PHOT 106 or PHOT 101 with a minimum grade of C in prerequisite or equivalent

Credit, degree applicable

Transfer CSU, UC*

This is a course in black and white still photography with an emphasis on the use of the 4 x 5 view camera, photographic equipment and film/analog and digital materials; photographic chemistry and mathematics, optics and physics of light; composition, studio lighting and creative expression. Laboratory techniques, including film processing, film/analog print making and digital printing are an integral part of this course.

Note: The maximum UC credit allowed for students completing Photography 102 and PHOT 101 is one course.
(formerly Photography 1)

PHOT 106 - Basic Photojournalism

3 units

2 hours lecture, 3 hours lab

Recommended Preparation: eligibility for ENGL 84

Credit, degree applicable

Transfer CSU

This course provides instruction in the elementary aspects of photography with emphasis on principles and techniques of photojournalism, including camera use, news photography, feature photography, sports photography, photo essays, and caption writing. Emphasis is placed on preparing students to take photographs for campus student publications using digital cameras and computer software such as Photoshop.

Note: Photography 106 is the same course as JOUR 6.

(formerly Photography 10)

PHOT 150 - The Art of Photography

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course is a survey of photography as an art form, which includes the evolution of photography as art. The course will also cover the aesthetic and cultural impact of photography as art. Also included is an examination of the techniques and methods of traditional and digital photography. Students will learn camera functions and develop their ability to analyze, evaluate, and compose photographs.

Note: Photography 150 is the same course as ART 150. Course credit is limited to Photography 150 or ART 150.

PHOT 202 - Intermediate Photography

4 units

2 hours lecture, 6 hours lab

Prerequisite: PHOT 102 with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course emphasizes film and digital photography as a creative and commercial art. The basics of commercial, portraiture, still life and fine art photography are covered. Intermediate photographic lighting and black and white printing techniques are introduced.

(formerly Photography 2)

PHOT 203 - Advanced Photography

4 units

2 hours lecture, 6 hours lab

Prerequisite: PHOT 202 with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course focuses on photography as a commercial and creative practice. Basic business practices for the photographer, along with fashion, industrial, advertising and product digital and film photography are covered. Advanced lighting designs and techniques, and printing skills are introduced. The production of professional portfolio quality digital and film photographic prints is emphasized.

(formerly Photography 3)

PHOT 204 - Portraiture

3 units

2 hours lecture, 3 hours lab

Prerequisite: PHOT 102 with a minimum grade of C

Credit, degree applicable

Transfer CSU

This is a course in black and white film and digital still photography with an emphasis on the photographic portrait. It includes basic portrait lighting designs, posing and the practical psychology of portrait photography, and the use of film, digital, 35mm, and 4" by 5" camera equipment for portrait work. Laboratory techniques include film and image processing, print making and lighting design construction.

(formerly Photography 4)

PHOT 206ab - Advanced Photojournalism

2 units

1 hour lecture, 3 hours lab

Prerequisite: JOUR 6 or PHOT 106 with a minimum grade of C in prerequisite or equivalent

Credit, degree applicable

Transfer CSU

This course provides instruction and laboratory experience in the taking and processing of photographs for publication in the college newspaper, newspaper website and news magazine. Students also receive experience in news, feature and sports photo editing, photo essay page design and layout, as well as digital photography and photo scanning techniques using Photoshop. All students enrolled in this course produce content for scholastic competition on the regional, state and national level.

Note: *This course may be taken two semesters for either Journalism or Photography credit. Photography 206ab is the same course as JOUR 7ab.

(formerly Photography 11ab)

PHOT 223A - Theory of Color/Color Printing

4 units

2 hours lecture, 6 hours lab

Prerequisite: PHOT 102 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

This course covers the theory and techniques of color digital and color film still photography. Emphasis is placed on the processing of various types of color negative film, color film and color digital image printing, and color cast correction. Color theory, the psychology of color, and the effects of various light sources on color temperature are included.

(formerly Photography 23A)

PHOT 223B - Intermediate Color Photography/Printing

4 units

2 hours lecture, 6 hours lab

Prerequisite: PHOT 223A with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course covers the advanced theory and practice of color digital and film still photography with an emphasis on the construction, processing and printing of color photographic materials. The additive color process will be introduced as well as techniques for printing color transparencies on color reversal paper, printing and processing photographic prints from color negatives, and making color balanced photographs and digital prints.

(formerly Photography 23B)

PHOT 254 - Intermediate 35mm Black and White Photography

2 units

1 hour lecture, 3 hours lab

Prerequisite: PHOT 101 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

In this course, students explore intermediate-level black and white 35mm photographic techniques and processes with an emphasis on print quality. Students are introduced to the imaginative use of hand-colored prints; infrared and high contrast graphic films and digital images.

(formerly Photography 54)

PHOT 257 - Creative Photographic Processes

2 units

1 hour lecture, 3 hours lab

Prerequisite: PHOT 254 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This is a course in creative photography with an emphasis on non-silver based photographic materials, creative black and white photographic processes, and digital processes. This will include the use of non-silver photographic emulsions applied to non-traditional surfaces and the creation of photographic books.

(formerly Photography 57)

PE 2 - Walking for Fitness

1 unit

3 hours lab

Credit, degree applicable

Transfer CSU, UC*

This course is designed to provide students with a foundation of aerobic fitness through walking. Students will progress from shorter duration, lower intensity walks to exercise sessions that include longer duration, higher intensity exercise and power walking. Conditioning programs will emphasize development of endurance, progressive increases in caloric expenditure, and improvements in body composition. Strategies for the prevention of injuries will be addressed. Successful completion of the course will result in improved aerobic fitness, increased caloric expenditure, and the ability to construct effective walking programs for continued benefit.

Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

(formerly Physical Education 2abcd)

PE 3 - Boot Camp Fitness Training

1 unit

3 hours lab

Credit, degree applicable

Transfer CSU, UC*

This course is an intense, highly regimented, military style form of physical conditioning. Disciplined forms of exercise include use of body weight, simple apparatus and calisthenics to develop aerobic and muscle fitness.

Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

(formerly Physical Education 3abcd)

PE 4 - Basketball

1 unit

3 hours lab

Credit, degree applicable

Transfer CSU, UC*

This course offers instruction and practice in the skills of basketball for the beginning to the advanced player. Offensive and defensive skills, such as footwork, dribbling, passing, and shooting, are taught along with defensive positioning and rebounding. Rules of the game will be covered along with game strategies and tournament play.

Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

(formerly Physical Education 4abcd)

PE 5abc - Men's Intercollegiate Baseball Team

3 units

10 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC*

This course provides instruction, training, and practice in the advanced techniques of baseball and the opportunity for intercollegiate competition. Students will compete against conference schools and other colleges.

Note: *This course is only offered in the spring semester. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

PE 6abc - Off-Season Training For Men's Intercollegiate Baseball Team

1 unit

3 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC*

This course provides instruction and practice in the advanced techniques of baseball. All students will engage in an off-season program emphasizing instruction, game tactics, skill development, strength training, and conditioning.

Note: *This course is only offered in the fall semester and summer session only. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

PE 7 - Baseball

1 unit

3 hours lab

Credit, degree applicable

Transfer CSU, UC*

Students are introduced to the sport of baseball through instruction and practice. Topics include batting, fielding, and base running skills as well as rules and game strategy. Students will participate in game situations that allow execution of skills and strategies in a competitive environment. A conditioning program specific to the sport will also be utilized.

Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

(formerly Physical Education 7abcd)

PE 10A - Body Conditioning and Physical Fitness

1 unit

3 hours lab

Credit, degree applicable

Transfer CSU, UC*

This course provides students with a fitness foundation through the means of cardiorespiratory endurance training, muscular strength and endurance training, and flexibility exercises. Students assess health-related components of fitness, set fitness goals, and monitor progression. Special emphasis is paid to the design and execution of a personalized exercise prescription.

Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

(formerly Physical Education 10)

PE 15abc - Men's Intercollegiate Basketball Team

3 units

10 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC*

This course provides instruction, training and practice in the advanced techniques of basketball and the opportunity for intercollegiate competition. Student athletes will compete against conference schools and other colleges.

Note: *This course is only offered in the fall semester. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

PE 16abc - Off-Season Training for Men's Intercollegiate Basketball Team

1 unit

3 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC*

This course provides instruction and practice in the advanced techniques of basketball. All students will engage in an off-season program emphasizing instruction, skill development, strength training, and conditioning.

Note: *This course is only offered in the fall semester and summer session only. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

PE 18A - Beginning Boxing

1 unit
3 hours lab
Credit, degree applicable
Transfer CSU, UC*

This course examines the skills, rules, etiquette, and strategies for boxing. Students will utilize correct body positioning and footwork as well as the principles and mechanics of punches and defenses. The training aspects of boxing as well as conditioning and fitness strategies will also be covered.

Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.
(formerly Physical Education 14abcd)

PE 18B - Intermediate Boxing

1 unit
3 hours lab
Prerequisite: PE 18A with a minimum grade of C or equivalent
Credit, degree applicable
Transfer CSU

This course expands on the skills and knowledge of beginning boxing. Students will advance from basic boxing fundamentals to intermediate level techniques and sparring, while enhancing balance, cardiorespiratory endurance, core and strength training.

PE 20abc - Intercollegiate Cross Country Teams

3 units
10 hours lab
Recommended Preparation: high school varsity experience or equivalent skill
Credit, degree applicable
Transfer CSU, UC*

This course provides instruction and training in the exercise techniques and principles required for successful development in cross country distance running and the opportunity for intercollegiate competition. Student athletes will compete against conference schools and other colleges and universities.

Note: *This course is only offered in the fall semester. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

PE 21abc - Off-Season Training for Intercollegiate Cross Country Teams

1 unit
3 hours lab
Recommended Preparation: high school varsity experience or equivalent skill
Credit, degree applicable
Transfer CSU, UC*

This course provides instruction and training in the exercise techniques and principles required for successful development in cross country distance running and intercollegiate competition. All students will engage in an off-season program emphasizing instruction, skill development, strength training, and conditioning.

Note: *This course is only offered in the spring semester and summer session only. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

PE 35abc - Men's Intercollegiate Football Team

3 units
10 hours lab
Recommended Preparation: high school varsity experience or equivalent skill
Credit, degree applicable
Transfer CSU, UC*

This course provides instruction and practice in the advanced offensive and defensive techniques and strategies of football and the opportunity for intercollegiate competition. Student-athletes may compete against conference schools and other colleges.

Note: This course is only offered in the fall semester.

PE 36abc - Off-Season Training for Men's Intercollegiate Football Team

1 unit

3 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC*

This course provides instruction, training, and practice in the advanced techniques of football. All students will engage in an off-season program emphasizing instruction, skill development, strength training, and conditioning.

Note: *This course is only offered in the spring semester and summer session only. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

PE 45abc - Men's Intercollegiate Golf Team

3 units

10 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC*

This course provides instruction and practice in the advanced techniques of golf and the opportunity for intercollegiate competition. Student athletes may compete against conference schools and other colleges. Student athletes must meet California Community College eligibility requirements as established by the California Community College Athletic Association.

Note: *This course is only offered in the spring semester. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

PE 46abc - Off-Season Training for Men's Intercollegiate Golf Team

1 unit

3 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC*

This course provides instruction, training, and practice in the advanced techniques of golf. All students will engage in an off-season program emphasizing instruction, skill development, strength training, and conditioning.

Note: *This course is only offered in the fall semester and summer session only. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

PE 47 - Introduction to Indoor Rock Climbing

1 unit

0.5 hour lecture, 1.5 hours lab

Credit, degree applicable

Transfer CSU, UC*

This course provides instruction and practice for developing rock climbing skills and fitness. Instruction will include: climbing ethics, preparation, safety, and knowledge of equipment, climbing techniques and the mental approach to climbing. Conditioning exercises are incorporated to build muscular strength, muscular endurance, flexibility, and balance for rock climbing. This course will facilitate critical thinking and problem solving skills related to rock climbing.

Note: Students pay fees for rock climbing equipment. *Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.
(formerly Physical Education 47abcd)

PE 54 - Weight Training

1 unit

3 hours lab Credit

Credit, degree applicable

Transfer CSU, UC*

This course offers basic through advanced instruction in the theory and techniques of progressive resistance exercise training. Course content includes basic muscle anatomy, individual goal setting and progress monitoring, exposure to a variety of training systems, and specific application of methods to individual goals and needs.

Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.
(formerly Physical Education 54abcd)

PE 57abc - Intercollegiate Swimming Teams

3 units

10 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC*

This course provides competitive swim training and intercollegiate competition. Students will engage in a program stressing skill development, strength training, cardiovascular conditioning, and competition.

Note: *This course is only offered in the spring semester. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

PE 58abc - Off-Season Training for Intercollegiate Swimming Teams

1 unit

3 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC*

This course provides instruction and practice in the advanced techniques of swimming. Students will engage in skill development and swim conditioning related to competitive swimming.

Note: *This course is only offered in the fall semester and summer session only. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

PE 60abc - Women's Intercollegiate Soccer Team

3 units

10 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC*

This course provides instruction, training, and practice in the advanced techniques of soccer and the opportunity for intercollegiate competition. Student athletes may compete against conference schools and other colleges.

Note: *This course is only offered in the fall semester. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

PE 61abc - Off-Season Training for Women's Intercollegiate Soccer Team

1 unit

3 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC*

This course provides instruction and practice in the advanced techniques of soccer. All students will engage in an off-season program emphasizing instruction, skill development, strength training, and conditioning.

Note: *This course is only offered in the spring semester and summer session only. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

PE 66abc - Off-Season Training for Men's Intercollegiate Tennis Team

1 unit

3 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC*

This course provides instruction, training, and practice in the advanced techniques of tennis. All students will engage in an off-season program emphasizing instruction, skill development, strength training, and conditioning.

Note: *This course is only offered in the fall semester and summer session only. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

PE 70abc - Men's Intercollegiate Soccer Team

3 units

10 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC*

This course provides practice and instruction in the advanced techniques of soccer leading to intercollegiate competition with member schools of the South Coast Conference and other colleges.

Note: *This course is only offered in the fall semester. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

PE 71abc - Off-Season Training for Men's Intercollegiate Soccer Team

1 unit

3 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC*

This course is designed for off-season soccer training. Students will engage in an off-season program stressing instruction, skill development, strength training, and cardiovascular conditioning.

Note: *This course is only offered in the spring semester and summer session only. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

PE 74A - Beginning Soccer

1 unit

3 hours lab

Credit, degree applicable

Transfer CSU, UC*

This course will provide instruction for beginning soccer players. Technical skills taught will include passing, controlling, heading, shooting, tackling, and dribbling the soccer ball. Basic soccer strategies will be introduced and students will gain a working knowledge of the Laws of Soccer. Students will learn the importance of fitness in order to be able to perform the technical aspects of soccer.

Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

(formerly Physical Education 74abcd)

PE 74B - Intermediate Soccer

1 unit

3 hours lab

Recommended Preparation: PE 74A

Credit, degree applicable

Transfer CSU

This course will provide instruction for soccer players who have reached the intermediate level of technical competency on the soccer field. Emphasis will be placed on four areas of the game: technical ability, tactical understanding, physical fitness, and the mental approach necessary to compete successfully. In addition there will be further discussion on the Laws of the Game, equipment, etiquette, flexibility and fitness.

PE 75abc - Intercollegiate Track and Field Teams

3 units

10 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC*

This course provides instruction, training, and practice in the advanced techniques of track and field. Students will have the opportunity for intercollegiate competition and will compete against conference schools and other colleges.

Note: *This course is only offered in the spring semester. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

PE 76abc - Off-Season Training for Intercollegiate Track and Field Teams

1 unit

3 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC*

This course provides instruction and practice in the advanced techniques of track and field. All students will engage in an off-season program emphasizing instruction, skill development, strength training, and conditioning.

Note: *This course is only offered in the fall semester and summer session only. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

PE 80abc - Men's Intercollegiate Volleyball Team

3 units

10 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC*

This course provides instruction and practice in the advanced techniques of men's volleyball and the opportunity for intercollegiate competition. Students may compete with member schools of the Western States Conference and other colleges.

Note: *This course is only offered in the spring semester. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

PE 81abc - Off-Season Training for Men's Intercollegiate Volleyball Team

1 unit

3 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC*

This course provides instruction and practice in the advanced techniques of men's volleyball. Emphasis is placed on advanced skill training, offensive and defensive systems, game strategy, and specific conditioning for volleyball.

Note: *This course is only offered in the fall semester and summer session only. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

PE 85abc - Men's Intercollegiate Water Polo Team

3 units

10 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC*

This course provides instruction, training, and practice in the advanced techniques of water polo and the opportunity for intercollegiate competition. Student athletes will compete against conference schools and other colleges.

Note: *This course is only offered in the fall semester. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

PE 86abc - Off-Season Training for Men's Intercollegiate Water Polo Team

1 unit

3 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC*

This course provides instruction and practice in the advanced techniques of water polo. All students will engage in an off-season program emphasizing instruction, skill development, strength training, and conditioning.

Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

PE 87abc - Women's Intercollegiate Water Polo Team

3 units

10 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC*

This course provides instruction and practice in advanced water polo techniques. Training format will be designed to develop endurance, strength, individual skills, and team skills specific to the sport of water polo. A variety of drills will encourage skill acquisition and foster coordinated team play. Game theory will engender an understanding of team play and the role each individual contributes to seamless team unity. Conditioning will enable the athletes to play the game at a high performance level.

Note: *This course is only offered in the fall semester. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

PE 105abc - Women's Intercollegiate Basketball Team

3 units

10 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC*

This course provides instruction, training, and practice in the advanced techniques of basketball and the opportunity for intercollegiate competition. Student athletes will compete against conference schools and other colleges.

Note: *This course is only offered in the fall semester. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

PE 106abc - Off-Season Training for Women's Intercollegiate Basketball Team

1 unit

3 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC*

This course provides instruction and practice in the advanced techniques of basketball. All students will engage in an off-season program emphasizing instruction, skill development, strength training, and conditioning.

Note: *This course is only offered in the spring semester and summer session only. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

PE 110abc - Women's Intercollegiate Volleyball Team

3 units

10 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC*

This course provides instruction and practice in the advanced techniques of women's volleyball. Students will compete against member schools of the South Coast Conference and other colleges.

Note: *This course is only offered in the fall semester. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

PE 111abc - Off-Season Training for Women's Intercollegiate Volleyball Team

1 unit

3 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC*

This course provides instruction and practice in the advanced techniques of women's volleyball. Emphasis is placed on advanced skill training. Offensive and defensive systems, game strategy, and specific conditioning for volleyball are incorporated.

Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

PE 115abc - Intercollegiate Tennis Teams

3 units

10 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC*

This course provides instruction, training, and practice in the advanced techniques of tennis and the opportunity for intercollegiate competition. Student athletes will compete against conference schools and other colleges.

Note: *This course is only offered in the spring semester and summer session only. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

PE 116abc - Off-Season Training for Women's Intercollegiate Tennis Team

1 unit

3 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC*

This course provides instruction, training, and practice in the advanced techniques of tennis. All students will engage in an off-season program emphasizing instruction, skill development, strength training, and conditioning.

Note: *This course is only offered in the fall semester and summer session only. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

PE 120abc - Women's Intercollegiate Softball Team

3 units

10 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC*

This course provides instruction, training, and practice in the advanced techniques of softball and the opportunity for intercollegiate competition. Students will compete against conference schools and other colleges.

Note: *This course is only offered in the spring semester. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

PE 121abc - Off-Season Training for Women's Intercollegiate Softball Team

1 unit

3 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC*

This course provides instruction and practice in the advanced techniques of softball. All students will engage in an off-season program emphasizing skill development, conditioning, and strategies of the game.

Note: *This course is only offered in the fall semester and summer session only. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

PE 132abc - Women's Intercollegiate Badminton Team

3 units

10 hours lab

Recommended Preparation: Recommended Preparation (high school varsity experience or equivalent skill)

Credit, degree applicable

Transfer CSU, UC*

This course provides instruction, training, and practice in the advance techniques of badminton and the opportunity for intercollegiate competition. Student athletes will compete against conference schools and other colleges.

Note: *This course is only offered in the spring semester. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

PE 133abc - Off-Season Training for Women's Intercollegiate Badminton Team

1 unit

3 hours lab

Recommended Preparation: high school varsity or equivalent skill

Credit, degree applicable

Transfer CSU, UC*

This course is open to team candidates and athletes for off-season badminton training. All participants will engage in an off-season program stressing instruction, skill development, strength training and cardiovascular conditioning.

Note: *This course is only offered in the fall semester. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

PE 135abcd - Sport-Specific, Periodized Training for Athletes

1 unit

3 hours lab to be arranged

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC*

Students will engage in physical conditioning that is specific to their sport. Training will be periodized with changes in training variables occurring at prescribed intervals and phases of training. Athletes' strengths and weaknesses in performing their sport, will be assessed injury risk will be identified. Test results, athlete goals, and coaches' input will be used to develop individual training programs to optimize physical conditioning and reduce risk of injury during any phase of the athlete's training.

Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

PE 140abc - Intercollegiate Sand Volleyball Team

3 units

10 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC*

This course provides instruction, training and practice in the advanced techniques of sand volleyball and the opportunity for intercollegiate competition. Student athletes will compete against member schools in their designated conference and against other colleges.

Note: *This course is only offered in the spring semester. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

PE 201 - Introduction to Adapted Physical Education

2 units

2 hours lecture

Recommended Preparation: ENGL 84

Credit, degree applicable

Transfer CSU

This course provides an introduction to Adapted Physical Education with an orientation to specific disabilities. Exercise theory and techniques will be discussed and wheelchair transfers will be practiced. Consequences of disuse syndrome and fitness benefits of exercise will also be discussed. Students will gain practical experience working with students with disabilities who are enrolled in the Adapted Physical Education. Students interested in pursuing careers in physical education, kinesiology, physical therapy, and nursing will find this course valuable.

PE 204 - Badminton

1 unit

3 hours lab

Credit, degree applicable

Transfer CSU, UC*

This course provides instruction and practice in the skills of badminton for the beginner to the advanced player. Progressions of skills include serving, clears, net shots, smash and drive. Rules, strategy and etiquette will be covered. Opportunities for singles and doubles competition in tournament play is included in the course.

Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

(formerly Physical Education 204abcd)

PE 208 - Bowling

1 unit
3 hours lab
Credit, degree applicable
Transfer CSU, UC*

This course examines the skills, rules, etiquette, scoring, and playing strategies for the activity of bowling. Students will be introduced to selecting the proper bowling ball and grip with an understanding of one's stance, approach, and delivery of the bowling ball. Students will practice the physical and mental skills required to succeed in this lifetime activity. Students will also participate in league play during the semester.

Note: Students will pay a user fee for each class meeting for bowling lanes, shoes, and bowling ball. Students must furnish their own transportation to and from the bowling alley. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.
(formerly Physical Education 208abcd)

PE 217 - Sports Officiating

2 units
2 hours lecture
Recommended Preparation: ENGL 84 and ENGL B
Credit, degree applicable
Transfer CSU, UC*

This course provides instruction in the basic principles and applications of sports officiating. A range of topics including officiating objectives, conduct, communication skills, conflict management, fitness, legal rights and responsibilities, and career development will be discussed.

Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

PE 220 - Naginata: A Japanese Martial Art

1 unit
3 hours lab
Credit, degree applicable
Transfer CSU, UC*

This course provides basic skills and knowledge related to Naginata - a Japanese martial art. Students will use a naginata (pole arm) for offensive and defensive tactics while incorporating precision techniques. Japanese terminology will orient students to the equipment and with instructional cues for on guard positioning, footwork, and target areas. The course is taught according to traditional Japanese teaching methods with emphasis on etiquette, mental focus, self-discipline and self-confidence. Culture, philosophy and historical concepts with Naginata will also be discussed.

Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.
(formerly Physical Education 220abcd)

PE 221 - Combative Arts and Self Defense

1 unit
3 hours lab
Credit, degree applicable
Transfer CSU, UC*

This course provides instruction and practice in the application of combative arts for use in self-defense. Techniques presented will include various strikes, punches, kicks and ground defense strategies. Defense against the headlock, bear hug, chokes and confrontational situations will also be practiced. Physical conditioning relative to performing self-defense techniques will be emphasized. Prevention of training related injuries will be addressed through proper warm up and stretching.

Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.
(formerly Physical Education 221abcd)

PE 224 - Golf

1 unit
3 hours lab
Credit, degree applicable
Transfer CSU, UC*

This course provides instruction and practice in the skills of golf for the beginner, intermediate or advanced golfer. Grip, stance, swing development and putting are taught along with the rules, strategy and etiquette of the game. Instruction and practice will be on campus and at a local course.

Note: Student will pay a user fee for each class meeting for 3-par (short course). Student must provide own transportation to and from the golf course. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

(formerly Physical Education 224abcd)

PE 233 - Pep Squad and Cheer

1 unit
3 hours lab
Recommended Preparation: high school varsity cheerleading experience or equivalent skill
Credit, degree applicable
Transfer CSU

This course is designed for aspiring cheerleaders who will perform choreographed sport-related cheers, dance and stunting routines. Synchronization of technical dance and gymnastic skills associated with enthusiastic cheerleading will be performed in class. Physical conditioning and spotting techniques will enhance skills and promote safety.

Note: This course is only offered in the fall semester.
(formerly Physical Education 233abc)

PE 234ab - Pep Squad and Cheer Competition

1 unit
3 hours lab
Prerequisite: PE 233 with a minimum grade of C or equivalent
Credit, degree applicable
Transfer CSU, UC*

This cheerleading course is designed for preparation for intercollegiate competition against other community colleges. Students will work on personal and team skill development and choreograph cheers, dance and stunting routines. Physical fitness is implemented to enhance competition routines and to reduce the risk of injury.

Note: *This course is only offered in the spring semester. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.
(formerly Physical Education 234abcd)

PE 239 - Slow Pitch Softball

1 unit
3 hours lab
Credit, degree applicable
Transfer CSU

This course offers instruction in slow pitch softball, practice, and competitive play suited for students of every skill level. Instruction and demonstration of basic and advanced technical skills, rules of the game, tactics and strategies and situational play will be presented. Exercise training specific to the physical demands of slow pitch softball will be included, as well as discussions on the health aspects of the sport and strategies of safety. Students successfully completing this course will acquire the skills and knowledge to enjoy slow pitch softball as a lifelong sport.

PE 240A - Beginning Swimming

1 unit
3 hours lab
Credit, degree applicable
Transfer CSU, UC*

This course is designed for the beginner swimmer. Instruction and practice will emphasize the fundamentals and stroke mechanics of freestyle, backstroke, elementary backstroke, and sidestroke. Beginning diving skills and treading water along with basic water safety and rescues will be demonstrated and practiced.

Note: Letter grade or pass/no pass option. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.
(formerly Physical Education 240)

PE 240B - Intermediate Swimming

1 unit
3 hours lab
Credit, degree applicable
Transfer CSU

This course is designed to teach intermediate level swimming skills. Emphasis is on enhancing stroke efficiency in freestyle, backstroke, elementary backstroke, and sidestroke. The fundamental mechanics of breaststroke and butterfly will be introduced. Additional emphasis will be placed on water safety skills and fitness.

Note: Letter grade or pass/no pass option.

PE 240C - Advanced Swimming

1 unit
3 hours lab
Prerequisite: PE 240B with a minimum grade of C or equivalent skill
Credit, degree applicable
Transfer CSU

This course is designed for advanced swimmers. Instruction, practice, and refinement will be emphasized for freestyle, backstroke, butterfly and breaststroke. Competitive turns for all four strokes will be discussed and practiced. Cardiovascular interval training techniques and exercise programs will be discussed and practiced. Aquatic activities such as water polo, diving, and aquatic games will be introduced.

Note: Letter grade or pass/no pass option.
(formerly Physical Education 241)

PE 245 - Water Aerobics

1 unit
3 hours lab
Credit, degree applicable
Transfer CSU, UC*

This course provides instruction on aerobic conditioning done in water. Emphasis is placed on cardiorespiratory endurance, flexibility, muscular strength, and endurance.

Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.
(formerly Physical Education 245abcd)

PE 247 - Swimming, Lifeguard Training

2 units

1 hour lecture, 3 hours lab

Enrollment Limitation: American Red Cross mandate - Level 5 Swimming Ability

Credit, degree applicable

Transfer CSU, UC*

This course follows the American Red Cross (ARC) Lifeguard Training program and provides the opportunity for certification in Red Cross Lifeguard, First Aid, and Cardiopulmonary Resuscitation (CPR) for the professional rescuer with Automated External Defibrillation (AED). Emphasis is placed on personal safety, professional conduct, injury prevention, emergency preparation, public interaction, and rescue techniques for pool and non-surf open water environments.

Note: Certification requires passing both ARC practical and written examinations. This course is only offered in the fall semester. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer. (formerly Physical Education 242abcd)

PE 248 - Swimming, Water Safety Instructor

2 units

1 hour lecture, 3 hours lab

Recommended Preparation: ENGL 84 Enrollment Limitation: American Red Cross mandates - Level 4 swimming ability and minimum age of 16 years at start of course

Credit, degree applicable

Transfer CSU, UC*

This course follows the American Red Cross (ARC) Water Safety Instruction (WSI) program and provides an opportunity for instructor certification. Principles and methods of teaching swimming, diving, water aerobics, and water safety are taught. Course activity also includes practice teaching.

Note: Certification requires passing both ARC practical and written examinations. This course is only offered in the spring semester. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

(formerly Physical Education 243abcd)

PE 249 - Swimming for Fitness

1 unit

3 hours lab

Recommended Preparation: ability to swim 50 yards without stopping using two of the competitive swimming strokes

Credit, degree applicable

Transfer CSU, UC*

This course will emphasize swim conditioning for the improvement of health and physical fitness. The class is designed to improve cardiovascular endurance, lung capacity, and muscular strength through aerobic and anaerobic conditioning. Stroke mechanics will be addressed and refined in the four competitive swimming strokes (freestyle, backstroke, breaststroke, and butterfly).

Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

(formerly Physical Education 246abcd)

PE 250 - Techniques of Surfboard Riding

1 unit

3 hours lab

Prerequisite: Physical Education 240 with a minimum grade of C or equivalent

Enrollment Limitation: must be able to swim 300 yards and tread water for three minutes

Credit, degree applicable

Transfer CSU, UC*

This course offers instruction in handling of surfboards and practice of safe riding in the surf. Topics such as ocean safety, hazards, currents, tides, weather conditions, wave selection, surfing etiquette, board and wetsuit selection, and paddle technique will be emphasized.

Note: Students may furnish their own surfboards and protective wetsuits to off-campus sites at local beaches. Surfboards and wetsuits are also available for rent on a daily basis. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

(formerly Physical Education 250abcd)

PE 251A - Beginning Tennis

1 unit
3 hours lab
Credit, degree applicable
Transfer CSU, UC*

This course offers tennis instruction, practice, and competitive play that is suited for the beginning player. Basic strokes, rules of the game, tactics, and strategies for singles and doubles play will be presented with the aim of improving the student's current ability level.

Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.
(formerly Physical Education 251)

PE 253 - Volleyball

1 unit
3 hours lab
Credit, degree applicable
Transfer CSU, UC*

This course provides instruction and practice in the skills of volleyball. Skill progressions of serving, passing, setting, spiking, digging and blocking are taught. Game strategies as applied to two person, four person and six person teams will be covered. Offensive and defensive systems as well as formations and line-ups are included. Tournaments are also included in the course, allowing the students to execute the skills in a competitive environment. The rules of both indoor and the outdoor games will be covered. Specific conditioning for the game of volleyball is also incorporated.

Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.
(formerly Physical Education 253abcd)

PE 254 - Cardio Fitness and Body Sculpting

1 unit
3 hours lab
Credit, degree applicable
Transfer CSU, UC*

This course focuses on the basic principles of cardiorespiratory conditioning and body sculpting. Emphasis is placed on exercise techniques and the development of cardiorespiratory endurance, muscle endurance, flexibility, and body composition. Fitness assessments are used to develop personalized self-paced workouts.

Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.
(formerly Physical Education 300abcd)

PE 255 - Beach Volleyball

1 unit
3 hours lab
Credit, degree applicable
Transfer CSU

This course provides instruction, strategies and practice of skills in sand volleyball. The course is designed to develop fundamental and advanced skills, knowledge of rules, team strategies and desire for future participation during leisure times.

PE 257 - Yoga for Health and Fitness

1 unit
3 hours lab
Credit, degree applicable
Transfer CSU, UC*

This course is designed to improve both fitness and health through mind and body integration. Yoga postures (asanas) are woven together to provide a workout that targets the body, but does not emphasize any religion, or philosophy. Breathing while performing the asanas is stressed. Various styles of Hatha Yoga will be introduced. This course will give the student both the knowledge and the practice to move toward improved health, fitness and mind and body awareness.

Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.
(formerly Physical Education 256abcd)

PE 258 - Power Vinyasa Yoga

1 unit

3 hours lab

Recommended Preparation: PE 257

Credit, degree applicable

Transfer CSU, UC*

This course is a challenging physical yoga practice designed to build significant strength, endurance, concentration, as well as flexibility. It is an athletic form of asana that appeals to students who want to learn how to take their fitness to the next level by practicing yoga.

Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

PE 259 - Circuit Training

1 unit

3 hours lab

Credit, degree applicable

Transfer CSU, UC*

This course focuses on the concept of circuit training: a sequence of exercises performed with minimal rest periods between exercise stations. Emphasis is placed on the development of cardiorespiratory endurance, muscular endurance, core conditioning and body composition. Assessments of fitness components will be used to develop exercise prescriptions.

Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

PE 260 - Basic Principles of Fitness and Weight Control

1 unit

1 hour lecture

Corequisite: PE 18A, or PE 2, or PE 3, or PE 47, or PE 4, or PE 10, or PE 54, or PE 74 or PE 135abcd or 240 or 241 or PE 245 or PE 249 or PE 250 or PE 251A or PE 253 or PE 254 or PE 257 or PE 258 or PE 259 or PE 400 or PE 401 or PE 404 or PE 409

Recommended Preparation: eligibility for ENGL A and ENGL 84

Credit, degree applicable

Transfer CSU

Students receive basic instruction for implementing physical activity programs for personal health and fitness. Guidelines for developing aerobic fitness, muscle strength and tone, flexibility, and life-long physical activity are presented in the context of reducing health risk factors, enhancing well-being, and maintaining long-term weight management. Basic nutritional recommendations are provided in support of these objectives.

Note: Assessments of aerobic fitness, body composition, and muscle strength are provided in the College's Exercise Science Laboratory.

PE 266 - Stress Management for Healthy Living

3 unit

3 hour lecture

Recommended Preparation: ENGL 1A

Credit, degree applicable

Transfer CSU

This course examines the effects of stress as it relates to work, sports, academics and daily life. Topics include understanding the nature of stress, the physiological and psychological reactions to stress and its effects on health (psychoneuroimmunology), assessments of personal coping styles, strategies for coping effectively with stress, relaxation techniques, mindfulness, and positive self-talk. Emphasis is placed on practical application of stress management techniques in daily life.

PE 270 - Fitness and Sports Nutrition

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL A and MATH 23

Credit, degree applicable

Transfer CSU

This course examines the nutritional and dietary requirements of physically active adults and those involved in athletic competition. The course emphasizes optimal nutrition regimens as an integral part of overall health and peak performance. Emphasis is placed on human nutrition needs, the role of supplements as ergogenic aids, and the integration of diet and exercise in achieving optimal body composition.

PE 272 - Care and Prevention of Athletic Injuries

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course provides the future athletic trainer, as well as coach and health care professional, the concepts surrounding the profession of athletic training. Emphasis is placed on the principles, techniques, and ethics in the prevention and care of athletic injuries. Study areas include the sports medicine team, legal issues, risk management, pathology of injury, management skills, and specific sports injuries and conditions.

PE 275 - Sport Psychology

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A and PSYC 5

Credit, degree applicable

Transfer CSU

This course is a scientific study of the psychological factors associated with participation and performance in sport activities. Emphasis will be placed on how psychological principles and research can be used to understand and enhance sport performance. Topics will include historical and theoretical perspectives of sport psychology, research methods, and the relationship between sport performance and various personality, motivational, and social psychological variables. Gender and age issues, as well as the effects and management of unhealthy behaviors, will be discussed.

PE 277 - Introduction to Kinesiology

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course is an introduction to the interdisciplinary approach to the study of human movement. It provides an overview of the importance of the sub-disciplines of kinesiology including the historical, professional, and philosophical foundations. Specialties such as exercise science, biomechanics, athletic training, fitness physical therapy, fitness, teaching, coaching, sport psychology, and adapted physical education are surveyed for their scope and career options.

PE 280 - Exercise and Nutrition Programs for Fitness and Weight Management

3 units

2 hours lecture, 2 hours lab

Recommended Preparation: eligibility for ENGL A and ENGL 84

Credit, degree applicable

Transfer CSU

Students will be given guidelines for the design of individual exercise programs of aerobic fitness, weight loss and development of muscle mass, muscle strength, and joint flexibility. Nutritional support for optimizing these fitness objectives is integrated throughout the course. Students participate in both classroom discussions and relevant exercise training in the El Camino College Fitness Center. Measurement of aerobic fitness (VO₂max), body composition, and tests of muscle function will be conducted to guide exercise and dietary recommendations.

PE 290 - Personal Fitness Trainer

3 units

2 hours lecture, 3 hours lab

Recommended Preparation: ENGL 84 and MATH 23

Credit, degree applicable

Transfer CSU

This course provides the scientific foundations and practical experience required by Personal Fitness Trainers for certification by agencies such as American College of Sports Medicine (ACSM), National Strength Coaches Association (NSCA), National Academy of Sports Medicine (NASM), and others. The course is broad-based with topical areas including basic exercise physiology, biomechanics, fitness assessments, exercise prescriptions, fitness training principles, nutrition, weight management and work with special populations. The business aspects of Personal Training are also reviewed.

PE 400 - Adapted Fitness

1 unit
3 hours lab
Credit, degree applicable
Transfer CSU, UC*

This course is designed for students with disabilities and provides personalized exercise programs. The components of physical fitness such as body composition, flexibility, muscle endurance, muscle strength, and cardiorespiratory endurance will be discussed. Training principles with each component of fitness will be practiced with an understanding of the physical and health benefits of exercise.

Note: Letter grade or pass/no pass option. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.
(formerly Physical Education 400abcd)

PE 401 - Adapted Strength Training

1 unit
3 hours lab
Credit, degree applicable
Transfer CSU, UC*

This course is designed for students with disabilities and provides personalized strength training programs. Fitness terminology, training principles, and benefits from resistance exercise will be discussed. Major muscle groups will be identified with an understanding of their function and application to specific exercises.

Note: Letter grade or pass/no pass option. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.
(formerly Physical Education 401abcd)

PE 402 - Adapted Swimming and Hydroexercise

1 unit
3 hours lab
Credit, degree applicable
Transfer CSU, UC*

This course is designed for students with disabilities and provides personalized instruction in swimming and hydroexercise. Water safety skills, fundamental swimming strokes, and physical fitness training principles in the water utilizing buoyancy and hydrodynamic resistance will be discussed and practiced.

Note: Letter grade or pass/no pass option. Letter grade or pass/no pass option. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.
(formerly Physical Education 402abcd)

PE 404 - Adapted Cardiovascular Fitness

1 unit
3 hours lab
Credit, degree applicable
Transfer CSU, UC*

This course is designed for students with disabilities and provides personalized instruction in cardiovascular exercise. Aerobic and/or anaerobic conditioning will be performed with an understanding of monitoring exercise frequency, intensity and duration. Fitness terminology, training principles, and benefits of exercise will be discussed.

Note: Letter grade or pass/no pass option. Students pay a user fee for each class meeting for bowling lanes, shoes, and bowling ball. Students must furnish their own transportation to and from the bowling alley. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.
(formerly Physical Education 404abcd)

PE 407 - Adapted Bowling

1 unit
3 hours lab
Credit, degree applicable
Transfer CSU, UC*

This course is designed for students with disabilities and provides personalized instruction in bowling. Skills, rules, etiquette, scoring, and playing strategies will be discussed. Students will participate in tournament and league play during the semester.

Note: Note: Letter grade or pass/no pass option. Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.
(formerly Physical Education 407abcd)

PE 409 - Adapted Yoga

1 unit
3 hours lab
Credit, degree applicable
Transfer CSU, UC*

This course is designed for students with disabilities and provides personalized instruction in yoga. Modified yoga postures (asanas) and breathing practices are introduced to improve strength, flexibility, balance, and stress reduction. This course will give the student both the knowledge and practice for improved health and greater mind and body awareness.

Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.
(formerly Physical Education 409abcd)

PSCI 25 - Exploring Physical Sciences

3 units
2 hour lecture, 4 hours lab
Recommended Preparation: English 84
Credit, degree applicable
Transfer CSU, UC*

This course is a broad based introductory study of the physical sciences for future elementary and middle school educators. The topics covered are part of the California science standards and are designed to introduce physics and chemistry. Topics include: energy, forces, motion, magnetism, electricity, gravitational interactions, properties of light and sound, changes of state, physical properties, atomic structure, and chemical changes. Drawing from their own observations and laboratory experiments, students will develop concepts and construct models that can predict outcomes of experiments.

Note: Physical Science 25 is not designed for majors in physics, astronomy, or chemistry.

Note: Students will not receive UC credit for Physical Science 25 if taken after a college level chemistry or physics course.

PHYS 1A - Mechanics of Solids

4 units
4 hours lecture, 2 hours lab
Prerequisite: One year of high school Physics or PHYS 2A and MATH 190 with a minimum grade of C in prerequisite or concurrent enrollment
Credit, degree applicable
Transfer CSU, UC*

This is the first course in a four-semester calculus-based physics sequence designed for students with majors in engineering and the physical sciences. The course focuses on the mechanics of solids, with topics including statics, kinematics, Newton's Laws, energy, power, linear and angular momentum, rotational dynamics, elasticity, simple harmonic motion, and gravitation.

Note: The maximum UC credit allowed for students completing Physics 1A, PHYS 1B, PHYS 1C, PHYS 1D and PHYS 2A, PHYS 2B and/or PHYS 3A, PHYS 3B is one series.

PHYS 1B - Fluids, Heat and Sound

3 units

3 hours lecture, 2 hours lab

Prerequisite: PHYS 1A with a minimum grade of C MATH 191 with a minimum grade of C or concurrent enrollment

Credit, degree applicable

Transfer CSU, UC*

This is the second course in a four-semester calculus-based physics sequence designed for students with majors in engineering and the physical sciences. This course focuses on fluids, thermodynamics, and wave phenomena, with topics including fluids, statics and dynamics, gas laws, heat transfer, engines, the first and second laws of thermodynamics, and sound.

Note: The maximum UC credit allowed for students completing PHYS 1A, 1B, PHYS 1C, PHYS 1D and PHYS 2A, PHYS 2B and/or PHYS 3A, PHYS 3B is one series.

PHYS 1C - Electricity and Magnetism

4 units

4 hours lecture, 2 hours lab

Prerequisite: Physics 1A with a minimum grade of C Mathematics 191 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC*

This course details the mathematical and physical description of Coulomb's Law, electric field and potential, Gauss's Law, DC circuit analysis with Ohm's Law and Kirchhoff's Law, AC circuit analysis with phase diagrams, elementary electronics, capacitance, magnetic fields and their effect on moving charges and currents, magnetic fields produced by various current configurations, induced emf, mutual and self-inductance, basic theory of dielectrics, magnetic properties of materials and Maxwell's Equations in integral and differential form.

Note: The maximum UC credit allowed for students completing PHYS 1A, PHYS 1B, PHYS 1C, PHYS 1D and PHYS 2A, PHYS 2B and/or PHYS 3A, PHYS 3B is one series.

PHYS 1D - Optics and Modern Physics

4 units

4 hours lecture, 2 hours lab

Prerequisite: PHYS 1A with a minimum grade of C MATH 191 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC*

This is the fourth course in four-semester calculus-based physics sequence intended for students entering majors in engineering and the physical sciences. The topics covered include geometric and physical optics, special relativity, quantum mechanics, nuclear physics, and selected topics in modern physics.

Note: The maximum UC credit allowed for students completing PHYS 1A, PHYS 1B, PHYS 1C, 1D and PHYS 2A, PHYS 2B and/or PHYS 3A, PHYS 3B is one series. This course is only offered in the spring semester.

PHYS 2A - General Physics

4 units

3 hours lecture, 3 hours lab

Prerequisite: MATH 170 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC*

This course is part of a one-year algebra- and trigonometry-based survey of physics. Topics covered include kinematics, statics, dynamics, momentum, energy, rotation, gravitation and planetary motion, fluids, kinetic theory of gases, and thermodynamics. In addition, the course covers elasticity and vibration, wave motion, interference, standing waves, and sound.

Note: The maximum UC credit allowed for students completing Physics 2A, PHYS 2B and PHYS 1A, PHYS 1B, PHYS 1C, PHYS 1D and/or PHYS 3A, PHYS 3B is one series.

PHYS 2B - General Physics

4 units

3 hours lecture, 3 hours lab

Prerequisite: PHYS 2A with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC*

This course is part of a one-year algebra- and trigonometry-based survey of physics. Topics covered include electric forces and fields, electric energy, electric circuits, magnetism, electromagnetic waves, geometric optics, wave optics, applied optics, relativity, electrons and photons, atomic structure, the nucleus, applied nuclear physics, and particle physics.

Note: The maximum UC credit allowed for students completing PHYS 2A, 2B and PHYS 1A, PHYS 1B, PHYS 1C, PHYS 1D and/or PHYS 3A PHYS 3B is one series.

PHYS 3A - General Physics with Calculus

5 units

4 hours lecture, 3 hours lab

Prerequisite: Mathematics 160 or MATH 190 with a minimum grade of C in prerequisite

Credit, degree applicable

Transfer CSU, UC*

This course is part of a one-year general survey of the basic principles of physics including kinematics, dynamics, statics, momentum, energy, rotation, gravitation, and planetary motion. Elasticity, fluids, vibration, wave motion, sound, the kinetic theory of gases, and thermodynamics will also be discussed. This course is designed for life science majors requiring a calculus-based physics program.

Note: The maximum UC credit allowed for students completing Physics 3A, PHYS 3B and PHYS 1A PHYS 1B PHYS 1C PHYS 1D and/or PHYS 2A PHYS 2B is one series.

PHYS 3B - General Physics with Calculus

5 units

4 hours lecture, 3 hours lab

Prerequisite: PHYS 3A with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC*

This course is a calculus-based survey of electricity, magnetism, light, geometric and physical optics, special relativity, and atomic and nuclear physics. This course is designed for life science majors requiring a calculus-based physics program.

Note: The maximum UC credit allowed for students completing PHYS 3A, 3B and PHYS 1A, PHYS 1B, PHYS 1C, PHYS 1D and/or PHYS 2A, PHYS 2B is one series.

PHYS 11 - Descriptive Introduction to Physics

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 84

Credit, degree applicable

Transfer CSU, UC*

This course utilizes lectures and demonstrations to present various principles of physics in a non-mathematical manner. Newton's Laws of motion and gravitation, momentum, work, energy and heat will be presented. Other topics will be selected from properties of matter, fluids, sound, light, electricity and magnetism, atomic and modern physics, special and general relativity.

Note: Students will not receive UC credit for Physics 11 if taken after PHYS 1A or PHYS 2A.

PHYS 12 - Laboratory for Introductory Physics

1 unit

3 hours lab

Prerequisite: PHYS 11 with a minimum grade of C or concurrent enrollment

Credit, degree applicable

Transfer CSU, UC*

This laboratory course is designed to give the student an opportunity to experimentally reinforce some of the fundamental concepts of physics studied in PHYS 11.

Note: Students will not receive UC credit for Physics 12 if taken after PHYS 1A or PHYS 2A.

PHYS 99 - Independent Study

1-3 units

hours to be arranged

Enrollment Limitation: two courses in the Physics 1 series with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work

Credit, degree applicable

Transfer CSU*

This course provides special advanced studies in a subject field of Physics not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Physics projects (54 hours per unit). *Note: Transfer limitations apply. Note: For eligibility requirements, go to www.elcamino.edu/admissions/credit.asp

Note: *Transfer limitations apply. For eligibility requirements, go to www.elcamino.edu/admissions/credit.asp (formerly Physics 99abc)

PHYO 31 - Human Physiology

4 units

2 hours lecture, 6 hours lab

Prerequisite: ANAT 32 and CHEM 20 or CHEM 21A or CHEM 4 with a minimum grade of C in prerequisite

Credit, degree applicable

Transfer CSU, UC*

This course is a study of cellular physiology and the functional aspects of the following human body systems: circulatory, respiratory, digestive, excretory, reproductive, muscle, nervous and endocrine. In the laboratory, experiments are performed to demonstrate principles discussed in lecture. This course is designed primarily for those majoring in the Health Sciences.

Note: The maximum UC credit allowed for students completing ANAT 32 and Physiology 31 is two courses.

POLI 1 - Governments of the United States and California

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC*

This course is a survey of the concepts, theories, and functions of the American political system. The basic principles of the United States Constitution and the government of California will be examined. Emphasis will be placed on the formal and informal influences of federalism on national and state governments.

Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.

POLI 1H - Honors Governments of the United States and California

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable Transfer CSU

This honors course, intended for students in the Honors Transfer Program, is a survey of the concepts, theories, and functions of the American political system. The basic principles of the United States Constitution and the government of California will be examined. Emphasis will be placed on the formal and informal influences of federalism on national and state governments. This course is enriched through extensive, rigorous reading, writing, and research assignments.

Note: Students may take either POLI 1 or Political Science 1H. Duplicate credit will not be awarded for POLI 1 and Political Science 1H.

POLI 2 - Introduction to Comparative Politics

3 units

3 hours lecture

Recommended Preparation: POLI 1 and eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

In this course, students will analyze political systems of different countries in a comparative context. Emphasis will be placed on studying the differences and similarities of governmental systems found in developed democratic nation-states. Developing countries, regional systems, and new democracies will also be analyzed to illustrate the complex nature of creating and maintaining a functioning nation-state system.

POLI 3 - Introduction to Principles and Methods of Political Science

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course focuses on analysis of the basic concepts, political theories and subfields of political science. Major topics include a description of the methodology and research techniques employed by contemporary political scientists. Major political theories of the individual and the state, and the impact of these themes on modern political ideologies will also be examined.

POLI 5 - Ethnicity in the American Political Process

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

In this course, students will analyze racial and ethnic group relations in the context of the American political system and process. The relationship of racial and ethnic groups in American society to local, state, and national governments will be examined. Emphasis is placed on problems of assimilation and integration into the American political system.

POLI 6 - Civil Rights and Liberties in the United States

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course introduces students to the study of civil rights and liberties based on current legislation and pertinent court decisions. Emphasis is placed on freedom of speech, religion and press, rights of the defendant, and equal protection issues of minority groups facing discrimination.

POLI 7 - Political Philosophy

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

In this course, students will examine political theory as presented in the primary works of major Western thinkers from Plato to Marx. Fundamental issues to be explored include human nature, justice, power, the role of the state, and the legitimate scope of government.

Note: Political Science 7 is the same course as PHIL 117.

POLI 10 - Introduction to International Relations

3 units

3 hours lecture

Recommended Preparation: POLI 1 eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

In this course students will examine the factors that determine the relations between nations and the problems that result from the interplay of these factors. The conditions that can lead to both conflict and cooperation among nations will be examined. Major topics include international security, issues of international political economy, and international organizations. International law and diplomacy are examined as alternative means of resolving conflict.

POLI 10H - Honors Introduction to International Relations

3 units

3 hours lecture

Recommended Preparation: POLI 1 eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This honors course, intended for students in the Honors Transfer Program, students will examine the factors that determine the relations between nations and the problems that result from the interplay of these factors. The conditions that can lead to both conflict and cooperation among nations will be examined. Major topics include international security, issues of international political economy, and international organizations. International law and diplomacy are examined as alternative means of resolving conflict. This course is enriched through extensive, rigorous reading, writing, and research assignments.

Note: Students may take either POLI 10 or Political Science 10H. Duplicate credit will not be awarded.

Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center advisor, or the articulation officer.

PSYC 2 - Psychology for Effective Living

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course is a study of personal development and adjustment in society as well as the psychosocial and cultural influences on childhood, adolescence, and adulthood. Emphasis on the application of psychological research and theories to the development of social skills and personal adjustments as well as practical approaches to problems of personal development and social relationships will be examined.

PSYC 3 - Critical Thinking and Psychology

3 units

3 hours lecture

Prerequisite: ENGL 1A with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course focuses on the development of critical thinking skills related to psychology. In addition to learning basic skills of logic, students will also learn about the logic of the scientific method and the common errors of human cognition that impede critical thinking. Emphasis is placed on the application of critical thinking skills to writing effective arguments, analyzing the writings of others, and understanding contemporary controversies in psychology.

PSYC 3H - Honors Critical Thinking and Psychology

3 units

3 hours lecture

Prerequisite: ENGL 1A with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This honors course, intended for students in the Honors Transfer Program, focuses on the development of critical thinking skills related to psychology. In addition to learning basic skills of logic, students will also learn about the logic of the scientific method and the common errors of human cognition that impede critical thinking. Emphasis is placed on the application of critical thinking skills to writing effective arguments, analyzing the writings of others, and understanding contemporary controversies in psychology.

Note: Students may take either PSYC 3 or Psychology 3H. Duplicate credit will not be awarded.

PSYC 5 - General Psychology

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course is a survey study of human behavior and mental processes with an emphasis on basic theory and research generated by the scientific method. Major topics include psychobiology, learning, human cognition, personality, lifespan development, psychological disorders, therapeutic approaches, and social psychology.

PSYC 5H - Honors General Psychology

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This honors course, intended for students in the Honors Transfer Program, is a survey study of human behavior and mental processes with an emphasis on basic theory and research generated by the scientific method. Major topics include psychobiology, learning, human cognition, personality, lifespan development, psychological disorders, therapeutic approaches, and social psychology. This course is enriched through extensive, rigorous reading, writing, and research assignments.

Note: Students may take either PSYC 5 or Psychology 5H. Duplicate credit will not be awarded for PSYC 5 and Psychology 5H.

PSYC 7 - Physiological Psychology

3 units

3 hours lecture

Prerequisite: PSYC 5 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course focuses on physiological factors in human development, behavior, and experience. Fundamental topics include consciousness, language, emotion, memory, and sensation/perception. Clinical topics include Sexual Disorders, Bipolar Disorder, Schizophrenia, Post-Traumatic Stress Disorder, Autism, Alzheimer's disease, and traumatic brain injury. Studies of both humans and other animals are evaluated and organized by scientific and clinical standards.

PSYC 8 - Social Psychology

3 units

3 hours lecture

Prerequisite: PSYC 5 or PSYC 5H with a minimum grade of C in prerequisite

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course focuses on the scientific study of the psychological processes and interpersonal interactions in and between groups. The emphasis is on individual behavior rather than on the group as a unit. Topics include social cognition social perception, attitudes prejudice and discrimination social and group influence aggression and prosocial behavior interpersonal attraction and intimate relationships and gender and culture.

PSYC 9A - Introduction to Statistics and Data Analysis for the Behavioral Sciences

4 units

3 hours lecture, 3 hours lab

Prerequisite: PSYC 5 or PSYC 5H or SOCI 101 and MATH 73 or MATH 80 with a minimum grade of C in prerequisite

Credit, degree applicable

Transfer CSU, UC*

Students are taught standard descriptive and inferential statistics for summarizing sample data and estimating population parameters. All aspects of significance testing are emphasized: hypotheses, models, calculations, interpretations, and criticisms. Students are also taught to review scientific articles critically and to write APA-style manuscripts.

Note: Psychology 9A is the same course as SOCI 109A.

The maximum UC credit allowed for students completing Psychology 9A and Sociology 109 or Psychology 9A and MATH 150 is one course.

PSYC 9B - Research Methods in the Behavioral Sciences

4 units

3 hours lecture, 3 hours lab

Prerequisite: MATH 150 or MATH 150H or PSYC 9A or SOCI 109A with a minimum grade of C in prerequisite

Credit, degree applicable

Transfer CSU, UC

This course is centered on the philosophy of science in general and the scientific method in particular. Students develop individual research studies with these elements: literature review, hypothesis, design and method, data collection and analysis, and discussion, oral presentation, and manuscript preparation (APA Publication Style).

Note: Psychology 9B is the same course as SOCI 109B.

This course is only offered in the spring semester.

PSYC 10 - African American Psychology

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course is an introduction to the psychological issues related to the African American experience in the United States. The relationship between the African American experience and social perception, social cognition, and identity and attitude formation is emphasized. Individual cognitive styles, personality development, and family structures of African Americans will also be examined.

PSYC 12 - Human Sexuality

3 units

3 hours lecture

Prerequisite: PSYC 5 with a minimum grade of C

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course is the scientific study of human sexuality. Emphasis is placed on analysis of sexuality from a psychological theoretical framework. Topics include the history of sex, the scientific research methods used to study sex, and the psychobiology of sex. This course also examines cultural views of sex and gender, sexual behavior and relationships, and sex as a social and medical issue.

PSYC 15 - Abnormal Psychology

3 units

3 hours lecture

Prerequisite: PSYC 5 with a minimum grade of C

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course focuses on the scientific study of both normal and abnormal experience and behavior. Emphasis is placed on the characterization, treatment, and prevention of psychological disorders ranging from mild to severe forms.

PSYC 16 - Lifespan Development

3 units

3 hours lecture

Prerequisite: PSYC 5 with a minimum grade of C

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course examines physical, cognitive and psychosocial development throughout the human lifespan from conception to death. Special emphasis is placed on culture, family relationships, and the interplay of genes and environment. Attention is also devoted to the practical application of research findings to ongoing developmental problems issues.

PSYC 17 - Cultural Psychology

3 units

3 hours lecture

Prerequisite: PSYC 5 with a minimum grade of C

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course will examine psychological principles, theory, and research through exploration of cultural differences and similarities, both within and across cultures. Topics may include the interplay between culture and developmental processes, cognition, emotion, communication, gender, personality development, psychopathology, and social behavior.

PSYC 19 - Psychology of Sexual Orientation and Gender Diversity

3 units

3 hours lecture

Recommended Preparation: PSYC 5 and Eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course is an introduction to psychological, social, and cultural aspects of sexual orientation and gender identity, with an emphasis on examining sexual orientation and gender identity from a psychological perspective. Topics will include historical perspectives on sexual orientation and gender identity and basic research methods used to study gender and sexuality applied topics such as identity, relationships, mental and physical health, sexuality, prejudice and discrimination, and the role of LGBTQ allies in effecting change will also be included.

PSYC 25 - The Psychology of Gender

3 units

3 hours lecture

Recommended Preparation: PSYC 5 and eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course is an overview of psychological perspectives and research on gender. Topics will include theoretical perspectives on gender, psychological research methods used to study gender, sex-related differences and comparisons, and the influence of gender in areas such as relationships, communication, health, and work.

RTEC A - Introduction to Radiologic Technology

3 units

3 hours lecture

Prerequisite: MATH 23 with a minimum grade of C or qualification by testing (El Camino College Mathematics Placement Test) and assessment eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This course provides an introduction to Radiologic Technology as a profession including foundational skills necessary to prepare students planning to enter the Radiologic Technology A.S. Degree Program. Course topics includes educational and career pathways for radiologic technologists, program application procedures, radiographic and digital imaging equipment, principles of radiation production, exposure and quality, image processing, radiation safety, patient care, medical malpractice, professional ethics, and introduction to radiographic examinations.

RTEC 91 - Radiographic Pathology

2 units

2 hours lecture

Enrollment Limitation: presently practicing clinical radiography (student or registered technologist)

Credit, degree applicable

Transfer CSU

This course provides basic knowledge of disease pathology and etiology as they pertain to diagnostic radiography. The course will emphasize the radiographic appearance of disease and influence on exposure factor selection. This course provides basic knowledge of pathology as it pertains to diagnostic radiography technology.

RTEC 93 - Venipuncture and Pharmacology for the Radiologic Technologist

1 unit

0.5 hour lecture, 1.5 hours lab

Prerequisite: RTEC 109 and RTEC 124 with a minimum grade of C in prerequisite

Corequisite: RTEC 255

Credit, degree applicable

Transfer CSU

This course provides the student with the basic concepts of pharmacology and venipuncture. The theory and practice of the basic techniques of venipuncture and the administration of diagnostic contrast agents and/or intravenous medications is included. Delivery of patient care during these procedures is also emphasized.

RTEC 104 - Clinical Education 1

1.5 units

4.5 hours lab per week to be arranged

Prerequisite: RTEC 106, RTEC 111 and RTEC 123 with a minimum grade of C in prerequisite

Credit, degree applicable

Transfer CSU

This course continues the development of clinical skills in the performance of radiographic examinations. Areas of skill development include the upper and lower extremities and radiography of the chest. Emphasis will be placed on radiation protection of the patient, self, and co-workers.

RTEC 106 - Clinical Experience 1

4 units

12 hours lab per week to be arranged

Corequisite: enrollment in RTEC 111 and RTEC 123

Enrollment Limitation: admission to the Radiologic Technology Program

Credit, degree applicable

Transfer CSU

This course provides an environment to apply and develop skills learned in patient transportation, hospital policies and procedures, image processing, professional ethics, practical aspects of radiation protection, and introduction to patient positioning.

RTEC 107 - Clinical Experience 2

7 units

21 hours lab per week to be arranged

Prerequisite: Radiologic Technology 106, 111, and 123 with a minimum grade of C in prerequisite

Corequisite: Radiologic Technology 124

Credit, degree applicable

Transfer CSU

This course provides an introduction to the routine radiographic procedures and positioning skills for the performance of upper extremity, lower extremity, thorax, vertebral column, biliary, genitourinary, and gastrointestinal system examinations.

Note: Students must show proof of current Cardiopulmonary Resuscitation (CPR) certification by the American Heart Association or American Red Cross (Health Care Provider/Professional Rescuer) at the first class meeting.

RTEC 109 - Clinical Experience 3

2.5 units

7.5 hours lab to be arranged

Prerequisite: RTEC 107 and RTEC 124 with a minimum grade of C in prerequisite

Credit, degree applicable

Transfer CSU

This course provides continued development of clinical skills in the performance of radiographic examinations to include the chest, abdomen, upper and lower extremities, vertebral column, bony thorax, pelvis, gastrointestinal, and urinary systems. Emphasis will be placed on contrast media examinations and radiation protection of the patient, self, and co-workers, with the use of fluoroscopy and mobile radiographic equipment. Special imaging consideration for the pediatric and geriatric patients, the acutely ill, surgical and trauma patients will also be covered.

RTEC 111 - Fundamentals of Radiologic Technology

4 units

3 hours lecture, 3 hours lab

Prerequisite: RTEC A with a minimum grade of C

Corequisite: RTEC 106 and RTEC 123

Enrollment Limitation: admission to the Radiologic Technology Program

Credit, degree applicable

Transfer CSU

This course is a combination of lab and lecture that explores the basic concepts and theories of radiologic science, technology, equipment, and physics in the field of radiology. The course content includes the study of matter, varying forms of energy, and different forms of radiation in radiology. Students will learn all of the essential equipment, how it functions, and proper-safe use in radiologic technology. The lab component of the course further reinforces the concepts taught in the didactic course.

RTEC 123 - Radiographic Positioning 1A

4 units

3 hours lecture, 3 hours lab

Corequisite: RTEC 106 and RTEC 111

Enrollment Limitation: admission to the Radiologic Technology Program

Credit, degree applicable

Transfer CSU

This course is designed to prepare the student with entry level skills and knowledge to perform safely in a radiology department. Topics include patient care, professional standards, and ethics and law as they relate to the radiologic technology profession. Patient positioning and radiographic exposure of the chest, upper and lower extremities are introduced along with the use of various radiographic devices. Laboratory practice, radiographic image analysis and topographical anatomy are presented as they apply in the production of optimum radiographic examinations.

RTEC 124 - Radiographic Positioning 1B

4 units

3 hours lecture, 3 hours lab

Prerequisite: RTEC 106, RTEC 111, and RTEC 123 with a minimum grade of C in prerequisite

Corequisite: RTEC 107

Credit, degree applicable

Transfer CSU

In this course, students will study additional principles of radiographic positioning. Emphasis is placed on those procedures involving the shoulder, bony thorax, pelvis, vertebral column, contrast media, gastrointestinal system, genitourinary system and biliary systems. Special imaging considerations for the pediatric and geriatric patients, the acutely ill, surgical patients, and trauma patients will also be covered. Radiographic technique, anatomy, specialized mobile and fluoroscopic equipment, patient safety, and radiation protection will be included. Laboratory practice, radiographic image analysis and critique, and topographical anatomy are presented as they apply in the production of optimum radiographic examinations.

RTEC 216 - Clinical Education 2

2 units

6 hours lab per week to be arranged

Prerequisite: RTEC 217 with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course provides continued development of clinical skills in the performance of radiographic examinations to include the chest, abdomen, upper and lower extremities, vertebral column, bony thorax, pelvis, cranium and facial bones. Emphasis will be placed on advanced contrast examinations and radiation protection of the patient, self, and co-workers, especially with the use of fluoroscopy and mobile radiographic equipment. Special imaging considerations for the pediatric and geriatric patients, the acutely ill, surgical and trauma patients will also be covered.

RTEC 217 - Clinical Experience 4

7 units

21 hours lab per week to be arranged

Prerequisite: RTEC 104 and RTEC 109 with a minimum grade of C

Corequisite: RTEC 233 and RTEC 244

Credit, degree applicable

Transfer CSU

This course continues development of clinical skills in the art of radiography with special emphasis on cranium radiography, age-specific competencies, and mobile and surgical imaging. In addition, students continue to complete mandatory and elective clinical performance evaluations, as outlined in the course syllabus and student handbook.

RTEC 218 - Clinical Experience 5

7 units

21 hours lab per week to be arranged

Prerequisite: RTEC 217 and RTEC 233 with a minimum grade of C in prerequisite

Corequisite: enrollment in RTEC 255

Credit, degree applicable

Transfer CSU

This course continues the development of clinical skills in the art of radiography, with an emphasis on observation of special imaging modalities and exams requiring the use of contrast media. Students will work towards completion of all mandatory and elective clinical performance evaluations including the categorical final competencies as outlined in the course syllabus and student handbook.

RTEC 220 - Clinical Experience 6

3 units

9 hours lab per week to be arranged

Prerequisite: RTEC 218 with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course continues the development of clinical skills in the performance of radiographic examinations, with a special emphasis in specialized radiography, new modalities and age-specific competencies. Advanced clinical practice experiences are designed to provide competent performance of radiologic imaging. Students will perform independently, with appropriate supervision to assess their skills for employability. The course emphasizes completions of all mandatory, elective and final clinical performance evaluations.

RTEC 233 - Radiographic Positioning 2

3 units

2 hours lecture, 3 hours lab

Prerequisite: RTEC 109 and RTEC 124 with a minimum grade of C in prerequisite

Corequisite: RTEC 217 and RTEC 244

Credit, degree applicable

Transfer CSU

In this course, students will learn additional principles of radiographic positioning. Emphasis is placed on those procedures involving the cranium. Topics will include radiographic technique, anatomy, specialized equipment, patient safety, and radiation protection. Special imaging modalities and techniques will be discussed. The most common cranium pathologies will be demonstrated and identified on radiographic images.

RTEC 244 - Radiation Physics, Equipment, and Safety

4 units

4 hours lecture

Prerequisite: RTEC 124 with a minimum grade of C

Corequisite: RTEC 217 and RTEC 233

Credit, degree applicable

Transfer CSU

This course continues with the study of radiation and radiological physics. Additional subjects covered are: the operation of medical x-ray and fluoroscopy units, the effects of radiation in humans, and the principles of radiation protection as applied in medical radiography. An introduction to health physics instrumentation, and radiation control regulations, with an emphasis on radiation health and safety will be discussed along with the principles of digital imaging.

RTEC 255 - Advanced Imaging and Special Procedures

4 units

4 hours lecture

Prerequisite: RTEC 233, RTEC 244 and RTEC 217 with a minimum grade of C in prerequisite

Corequisite: enrollment in RTEC 218

Credit, degree applicable

Transfer CSU

This course is designed for the advanced radiography student. Emphasis is placed on anatomy, pathology, positioning and patient care for specialized radiographic procedures. Newer imaging modalities are explored, along with cross section anatomy. Advanced modalities such as CT, MRI, Nuclear Medicine, PET, Ultrasound and Radiation Therapy are covered. An in-depth exploration of digital imaging fluoroscopy and radiation safety principles are also reviewed.

RTEC 328 - Clinical Experience 7

4.5 units

3 hours lecture, 32 hours lab to be arranged (6 week course)

Prerequisite: RTEC 220 with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course continues the development of clinical skills in radiography with emphasis in specialized radiography and new modalities. Advanced clinical practice experiences are designed to provide competent performance of radiologic imaging, using sequential development, critical analysis, and evaluation in the performance of radiologic procedures and patient assessment and care. Students perform independently with appropriate supervision to assess their skills for employability. This course also reviews the entire radiologic technology curriculum, following the American Registry of Radiologic Technologists (ARRT) examination outline, to prepare the students for State and National Certification examinations.

RE 11 - Real Estate Principles

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This course covers various aspects of real estate, including an introduction to legal aspects, title and escrow procedures, property management, appraisal, finance, and the ownership of real property. Students develop basic vocabulary and test-taking skills in partial preparation for state examination for a California Bureau of Real Estate (BRE) license.

Note: The California Bureau of Real Estate (BRE) requires completion of this course prior to taking the California Real Estate Salesperson Examination and has approved this course for credit for the BRE broker's license requirement.

RE 12A - Legal Aspects of Real Estate

3 units

3 hours lecture

Recommended Preparation: ENGL 82

Credit, degree applicable

Transfer CSU

This course provides instruction on the buying, selling, and management of real property. Students study California property law, community property, liens, sales contracts, escrow, commissions, transfers, licensing regulations, and public policy.

Note: The California Bureau of Real Estate (BRE) has approved this course as one of the elective courses for the salesperson license, in addition to the required courses of Real Estate Principles and Real Estate Practice. The California Bureau of Real Estate (BRE) has approved this course as one of the required courses for the real estate broker license.

RE 13 - Real Estate Practice

3 units

3 hours lecture

Recommended Preparation: RE 11 or current enrollment or California Bureau of Real Estate (BRE) license or equivalent experience

Credit, degree applicable

Transfer CSU

In this course, students will be introduced to the standard forms used in the real estate industry and will learn techniques necessary to close a residential real estate transaction. Students will develop skills in partial preparation for the state examination for a California Bureau of Real Estate (BRE) license, with emphasis placed on advertising, listings, finance, appraisal, escrow and the tax aspects of real property ownership.

Note: The California Bureau of Real Estate (BRE) requires completion of this course prior to taking the California Real Estate Salesperson Examination and has approved this course for credit for the BRE broker's license requirement.

RE 14A - Real Estate Finance I

3 units

3 hours lecture

Recommended Preparation: RE 11 or concurrent enrollment or California Bureau of Real Estate (BRE) license or equivalent experience BUS 15

Credit, degree applicable

Transfer CSU

This course provides instruction on the various aspects of finance, including fixed and variable rate loans, conventional and government financing programs, and creative financing options. Students will calculate unpaid loan balance, interest, and loan qualifying ratios.

Note: This course is approved by the California Bureau of Real Estate (BRE) as one of the mandatory eight statutorily required college-level courses for the broker license and for the salesperson license, which also requires Real Estate Principles and Real Estate Practice.

RE 14B - Advanced Real Estate Finance

3 units

3 hours lecture

Prerequisite: RE 14A with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course provides instruction on the more advanced methods of financing real estate projects, including non-residential commercial and industrial property. Emphasis is placed on the instruments of finance, types of structured loans, discounting leases, and the sale-leaseback transaction.

Note: The California Bureau of Real Estate (BRE) has approved this course as one of the elective courses for the real estate broker license.

RE 16 - Real Estate Economics

3 units

3 hours lecture

Recommended Preparation: RE 11, RE 14A and RE 40 or California Bureau of Real Estate (BRE) license or California Bureau of Real Estate Appraisers (BRE) license

Credit, degree applicable

Transfer CSU

This course provides instruction on the aspects that tie economics and politics to real estate land use. Emphasis is on the factors, which create value in real estate, including urban development, governmental policies and requirements for development, as well as the business and real estate cycles.

Note: The California Bureau of Real Estate (BRE) has approved this course as one of the elective courses for the salesperson license in addition to the required Real Estate Principles and Real Estate Practice. The California Bureau of Real Estate (BRE) has approved this course as one of the elective courses for the real estate broker license.

RE 19 - Real Property Management

3 units

3 hours lecture

Recommended Preparation: RE 11 and RE 12A or California Bureau of Real Estate (BRE) license or California Bureau of Real Estate Appraisers (BRE) license or equivalent BUS 15

Credit, degree applicable

Transfer CSU

This course covers various aspects of property management for income producing real property, including rights of the parties, personnel for on-site and off-site rental-income property, introduction to legal contracts for rental property, physical maintenance, and trust fund accounting fundamentals including security deposits.

Note: This course is approved by the California Bureau of Real Estate (BRE) as one of the elective courses for the eight statutorily required college-level courses for the broker license and for the salesperson license, which also requires Real Estate Principles and Real Estate Practice.

RE 21 - Real Estate Investments

3 units

3 hours lecture

Recommended Preparation: RE 11 and RE 14A

Credit, degree applicable

Transfer CSU

This course discusses the acquisition phase, holding period and disposition analysis for real estate investment property. The course covers a review of pro forma statements, the effects of leverage and cash flow operating statements. Students develop strategies for decision-making alternatives for a sale, exchange, continuation of operations, and capital restructure using depreciation, installment sale and tax basis.

Note: The California Bureau of Real Estate (BRE) has approved this course as one of the elective courses that may be completed for the salesperson license in addition to the required courses of Real Estate Principles and Real Estate Practice. The California Bureau of Real Estate (BRE) has approved this course as one of the elective courses for the real estate broker license. The BRE requires a copy of the college course outline or catalog description along with transcript showing proof of course completion.

RE 26 - Escrows

3 units

3 hours lecture

Recommended Preparation: RE 11

Credit, degree applicable

Transfer CSU

This course provides instruction in the functions of an escrow in a real property transaction. Emphasis is on residential escrow, with transactional variations studied for an escrow involving a seller, a buyer, refinance or loan, mobile home, and non-residential specialty escrows including commercial and industrial property, liquor license, impound account, probate and securities transaction. The course covers title insurance, prorations, and escrow settlement closing statements.

Note: The California Bureau of Real Estate (BRE) has approved this course as one of the elective courses that may be completed for the salesperson license in addition to the required Real Estate Principles and Real Estate Practice. The California Bureau of Real Estate (BRE) has approved this course as one of the optional courses for the real estate broker license.

RE 31 - Mortgage Loan Brokering and Lending

3 units

3 hours lecture

Recommended Preparation: RE 11 or concurrent enrollment or California Bureau of Real Estate (BRE) license or equivalent experience BUS 15

Credit, degree applicable

Transfer CSU

This course introduces the student to the principles and operations of the mortgage loan brokering field. The emphasis is on the lending rules for residential property. Students learn lending laws of Regulation Z, usury laws, disclosures, maximum fees and charges, agency relationships, advertising laws, Housing and Urban Development (HUD) and Real Estate Settlement Procedures Act (RESPA) calculations and the loan process. This course partially satisfies the California requirements for the Real Estate Salesperson and California Real Estate Broker licenses.

Note: This course is approved by the California Bureau of Real Estate (BRE) as one of the elective courses for the eight statutorily required college-level courses for the broker license and for the salesperson license, which also requires Real Estate Principles and Real Estate Practice.

RE 40 - Real Estate Appraisal

3 units

3 hours lecture

Recommended Preparation: RE 11 or California Bureau of Real Estate Appraisers (BREA) license or California Bureau of Real Estate (BRE) broker's license

Credit, degree applicable

Transfer CSU

This course provides instruction in the valuation principles of real estate appraisal, including architectural styles, types of construction, lot valuation, depreciation, the approaches to value, and appraisal standards and ethics.

Note: The California Bureau of Real Estate (BRE) has approved this course as one of the optional courses that must be completed within 18 months of conditional salesperson licensure in addition to the required courses of Real Estate Principles and Real Estate Practice. This course is statutorily required for the California real estate broker license. The California Bureau of Real Estate Appraisers (BREA) has approved this course for 54 hours of basic education (BE) credit. BREA has approved this course for 51 hours of continuing education (CE) credit for license renewal provided the student has 90 percent attendance and passes a closed book final exam.

RE 41 - Advanced Real Estate Appraisal

3 units

3 hours lecture

Prerequisite: RE 40 with a minimum grade of C or California Bureau of Real Estate Appraisers (BREA) license or California Bureau of Real Estate (BRE) broker license

Credit, degree applicable

Transfer CSU

This course provides instruction in advanced concepts of the income approach to value process for real property, analyzing operating expenses, capitalization, and depreciation. Students develop proficiency in utilizing residential income and commercial and industrial property appraisal guidelines to create a standard appraisal form. Emphasis is placed on the advanced cost approach valuation, in addition to the Uniform Standards of Professional Appraisal Practice (USPAP) ethics.

Note: The California Bureau of Real Estate (BRE) has approved this course as one of the elective courses for the real estate broker license. This course is not approved by BRE for the educational requirements for the salesperson license.

RE 95 - Cooperative Work Experience Education

2-4 units

hours to be arranged

Enrollment Limitation: Employment or volunteer work in a position related to the student's major or career goal by the second week of the semester. Completion of or current enrollment in one course from the major.

Credit, degree applicable

Transfer CSU*

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Real Estate/Business field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

Note: *Transfer limitations apply. The total units earned for Cooperative Work Experience Education may not exceed 16 units. (formerly Real Estate 95/96abcd)

RECR 207 - Introduction to Recreation

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This course examines the basic concepts of recreation and leisure as well as the trends in the overall field of recreation services. The course is designed to encourage students to critically examine the field of recreation and how it impacts their lives and those of the individuals in their community.

RECR 217 - Recreational Leadership

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

Leadership concepts and skills for students beginning to work in recreational settings are presented in a leisure services context. Roles, types, and responsibilities of recreational leaders are examined as well as skills needed to encourage participation in recreation programs among different age groups.

RECR 307 - Camp Counseling: Leadership and Programming

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This course covers the history, practices, and philosophy of organized camp and camp counseling. Emphasis is placed on the camp counselor's role in guidance and leadership, analysis of techniques of camp counseling, proper planning, and theory of camping. The operations of day and short-term recreational camps and outdoor camps, as well as professional opportunities in the field are also examined.

RC 170 - Introduction to Respiratory Care Sciences and the Profession

2 units

2 hours lecture

Credit, degree applicable

This course provides students an opportunity to see if their attitudes, aptitudes and interests are matched to those needed by successful respiratory care practitioners. The course reviews all the requirements for successful completion of the program and entrance into the health care industry. The course will also provide the student with an introduction to the basic sciences as they apply in the Respiratory Care profession.

RC 172 - Fundamentals of Cardiopulmonary Physiology and Pharmacology in Respiratory Care

3 units

3 hours lecture

Prerequisite: ANAT 30 with a minimum grade of C or concurrent enrollment

Recommended Preparation: RC 170 or concurrent enrollment

Credit, degree applicable

This course will cover the fundamental cardiopulmonary anatomy, physiology, and pharmacology required for entry-level practice in the Respiratory Care profession. In addition, emphasis will be placed on the achievement and maintenance of bronchial hygiene in patients with respiratory disorders through the use of airway care, aerosols, and chest physiotherapy.

RC 174 - Introduction to Respiratory Care Equipment and Patient Care Procedures

3 units

1 hour lecture, 6 hours lab

Recommended Preparation: RC 170

Credit, degree applicable

This course will review operational concepts and procedures for respiratory care equipment. The student will get hands-on experience selecting, assembling and checking respiratory care equipment for proper function, operation and cleanliness. The course will also provide experience performing and understanding the purpose of basic care procedures such as charting, vital signs, bed operation and other respiratory care related basic patient care procedures.

RC 176 - Introduction to the Respiratory Care of the Non-Critically Ill Patient

6 units

3 hours lecture, 9 hours lab per week to be arranged

Prerequisite: RC 172 and RC 174 with a minimum grade of C in prerequisite

Enrollment Limitation: admission to the Respiratory Care Program requiring a completed application and physical exam forms indicating readiness for clinical practice as a Respiratory Care Practitioner

Recommended Preparation: CIS 13 and PSYC 5

Credit, degree applicable

This course deals primarily with the non-critically ill adult patient. It will provide the student with cognitive and psychomotor practice performing basic respiratory care in health service organizations in the South Bay Area. Students receive most of their classroom/cognitive instruction at El Camino College and are rotated during the day, evening and/or night shifts to clinical affiliates.

Note: It is strongly advised that all non-respiratory care courses required for the Respiratory Care Associate in Science degree be completed prior to enrollment in this course.

RC 178 - Respiratory Care of the Critically Ill Patient I

8 units

4 hours lecture, 12 hours lab per week to be arranged

Prerequisite: RC 176 with a minimum grade of C

Credit, degree applicable

This course is an introduction to the practice of respiratory care in intensive care units with an emphasis on patient ventilator interaction. The student will manage critically ill patients on prolonged artificial ventilation using microprocessor-driven ventilators, alarms, arterial blood gases and other appropriate techniques and equipment. Students are rotated through evening, night and day critical care units in hospitals.

RC 280 - Respiratory Care of the Critically Ill Patient II

9 units

4 hours lecture, 15 hours lab per week to be arranged

Prerequisite: RC 178 with a minimum grade of C

Credit, degree applicable

This course continues with the treatment and management of adult patients who are critically ill. The course provides the student with the opportunity to develop more complex reasoning and patient care skills. Problem-oriented use of patient data including intermediate respiratory care assessment and decision-making using blood gases, x-rays, response to therapy and other appropriate clinical indicators will be emphasized.

RC 282 - Fundamentals of Perinatal and Pediatric Respiratory Care

4 units

2 hours lecture, 6 hours lab per week to be arranged

Enrollment Limitation: Students must be admitted to the El Camino College Respiratory Care Program or be graduated from an accredited respiratory care program.

Credit, degree applicable

This course will introduce the student to the basic anatomy and physiology of the fetus, neonate and pediatric patient. The student will learn the fundamental therapeutic procedures, equipment and data used to provide pediatric and perinatal respiratory care. Pediatric basic and advanced life support will also be taught in the classroom, lab and clinical setting.

RC 284 - Respiratory Care of the Critically Ill Patient III

9 units

4 hours lecture, 15 hours lab per week to be arranged

Prerequisite: RC 280 with a minimum grade of C

Credit, degree applicable

This course continues with the treatment and management of adult patients who are critically ill. The course provides the student with the opportunity to develop more complex reasoning and patient care skills. A disease-directed approach is used with emphasis on respiratory failure, chronic obstructive pulmonary disease and related respiratory conditions and deadspace problems. The course reviews the problems of nosocomial infections in respiratory care and systematic methods for identifying and correcting patient-therapist equipment contamination. Communication skills are introduced that will help the therapist relay suggestions and information to other members of the health care team.

RC 286 - Fundamentals of Pulmonary Rehabilitation and Home Respiratory Care

3 units

2 hours lecture, 3 hours lab per week to be arranged

Enrollment Limitation: Students must be admitted to the El Camino College Respiratory Care Program or be graduated from an accredited respiratory care program.

Credit, degree applicable

This course focuses on the treatment and management of adult patients who have chronic respiratory conditions and diseases. The course provides the student with the opportunity to develop skills managing patients requiring pulmonary rehabilitation and home respiratory care. The problem-oriented approach to developing a Respiratory Care plan will be covered emphasizing the use of, and the ability to collect, patient data. Skills to be learned will include performance of a physical exam of the patient, arterial puncture, establishment of intravenous fluid lines, exercise evaluation, patient education and prevention of infection.

RC 288 - Fundamentals of Pulmonary Function Testing

3 units

2 hours lecture, 3 hours lab per week to be arranged

Enrollment Limitation: Students must be admitted to the El Camino College Respiratory Care Program or be graduated from an accredited respiratory care program.

Credit, degree applicable

This course will review the fundamental procedures and equipment used to measure pulmonary function in non-symptomatic populations and in populations of people with chronic pulmonary diseases. Experience with exhaled air data collection will be provided through hands-on procedures at the college and at health service organizations' diagnostic laboratories. Skills to be learned will include performance of public health screening and diagnostic pulmonary function testing.

RC 289 - Advanced Respiratory Care of the Asthmatic Patient

3 units

2 hours lecture, 3 hours lab per week to be arranged

Enrollment Limitation: Students must be admitted to the El Camino College Respiratory Care Program or be graduated from an accredited respiratory care program.

Credit, degree applicable

This course provides instruction in asthma management associated with advanced respiratory care. Topics include diagnosing and assessing the severity of asthma; medications; ability to treat asthma in an ambulatory setting; special considerations in childhood asthma; the use of pulmonary function testing and peak flow monitoring to diagnosis and manage asthma; identifying allergic sensitivities and promoting allergen avoidance; as well as being able to develop and implement asthma action plans.

RC 290 - Advanced Specialty Respiratory Gases

2 units

1 hour lecture, 3 hours lab per week to be arranged

Enrollment Limitation: Students must be admitted to the El Camino College Respiratory Care Program or be graduated from an accredited respiratory care program.

Credit, degree applicable

This course provides instruction in respiratory specialty gases. Topics include the physiology of nitric oxide and heliox specialty gases, indications for use, contraindications, dose and dose titration, hazards, as well as the delivery and monitoring of each gas.

RC 291 - Advanced Specialty Ventilators and Specialized Oxygen Delivery Devices

3 units

2 hours lecture, 3 hours lab per week to be arranged

Enrollment Limitation: Students must be admitted to the El Camino College Respiratory Care Program or be graduated from an accredited respiratory care program.

Credit, degree applicable

This course provides instruction in specialty ventilators and oxygen delivery devices. Topics include high frequency oscillatory ventilation; high frequency jet ventilation; Vapotherm; SiPAP; and T-Piece Resuscitation. The indications, contraindications, and appropriate delivery will be discussed and reviewed for multiple patient populations.

RC 292 - Advanced Clinical Application and Interpretation of Blood Gases

2 units

2 hours lecture

Enrollment Limitation: Students must be admitted to the El Camino College Respiratory Care Program or be graduated from an accredited respiratory care program.

Credit, degree applicable

This course provides instruction in respiratory clinical application of blood gases. Topics include the fundamentals of acid-base and respiratory physiology assessment and interpretation of blood gas values blood gas values applied to patient care validation of results with other modalities and appropriate methods to collect, analyze, and report blood gas results.

RC 293 - Cardiac Monitoring in Advanced Respiratory Care

4 units

3 hours lecture, 3 hours lab per week to be arranged

Enrollment Limitation: Students must be admitted to the El Camino College Respiratory Care Program or be graduated from an accredited respiratory care program.

Credit, degree applicable

This course provides instruction in cardiac monitoring associated with advanced respiratory care. Topics include twelve-lead Electrocardiogram interpretation central venous pressure Pulmonary Artery Pressure Cardiac Index and usage of pressure transducers, pulmonary and arterial catheters, as well as treatment of cardiac conditions using electrolytes, cardiac medications and diuretics. Laboratory experiments and clinical visitation will be used to complement the didactic instruction.

RC 294 - Pulmonary Function Testing in Advanced Respiratory Care

4 units

3 hours lecture, 3 hours lab

Enrollment Limitation: Students must be admitted to the El Camino College Respiratory Care Program or be graduated from an accredited respiratory care program.

Credit, degree applicable

This course provides instruction in pulmonary function testing associated with advanced respiratory care. Topics include metabolic measurements using indirect calorimetry; pediatric pulmonary function testing; cardiopulmonary exercise testing; sleep studies; and bronchoscopy. Laboratory experiments and clinical visitation will be used to complement didactic instruction.

RC 295 - Pharmacology in Advanced Respiratory Care

3 units

3 hours lecture

Enrollment Limitation: Students must be admitted to the El Camino College Respiratory Care Program or be graduated from an accredited respiratory care program.

Credit, degree applicable

This course provides instruction in pharmacology associated with advanced respiratory care. Topics include current trends in respiratory pharmacology; the use of sedatives, analgesics, antibiotics, and paralytic agents in various delivery forms during advanced therapeutic modalities; as well as other pharmacological agents used during specialized testing regimens.

RC 296 - Physical Examination in Advanced Respiratory Care

4 units

3 hours lecture, 3 hours lab per week to be arranged

Enrollment Limitation: Students must be admitted to the El Camino College Respiratory Care Program or be graduated from an accredited respiratory care program.

Credit, degree applicable

This course provides instruction in physical examination associated with advanced respiratory care. Topics include physical assessment; collection of lab data; the interview process; and current imaging studies.

RC 297 - Perinatal and Pediatric Care in Advanced Respiratory Care

4 units

3 hours lecture, 3 hours lab per week to be arranged

Enrollment Limitation: Students must be admitted to the El Camino College Respiratory Care Program or be graduated from an accredited respiratory care program.

Credit, degree applicable

This course provides instruction in perinatology and pediatrics associated with advanced respiratory care. Topics include respiratory care monitoring; diagnostics; advanced concepts in emergency procedures; and current topics in perinatal and pediatric respiratory care. Laboratory experiments and clinical visitation will be used to complement lectures.

RC 298 - Advanced Emergency Management

3 units

2 hours lecture, 3 hours lab per week to be arranged

Enrollment Limitation: Students must be admitted to the El Camino College Respiratory Care Program or be graduated from an accredited respiratory care program.

Credit, degree applicable

This course provides instruction on the role of the respiratory therapist during disaster management. Topics include intra-hospital transport; land and air transport; rapid response teams; distinguishing the various color codes within a hospital; disaster preparedness at the federal, state, and local levels; and the requirements for disaster preparedness within the hospital.

SLAN 101 - Individualized American Sign Language Laboratory

1 unit

3 hours lab per week to be arranged

Prerequisite: Sign Language/Interpreter Training 15 with a minimum grade of C or concurrent enrollment

Credit, not degree applicable

This laboratory course provides opportunities for practice and further development of American Sign Language (ASL) skills. Self-paced study allows students to improve both signing and comprehension skills. Interactive exercises and visual media will be utilized to reinforce vocabulary and syntax.

Note: Pass/no pass only.

(formerly Sign Language/Interpreter Training 101abcd)

SLAN 111 - American Sign Language I

4 units

4 hours lecture

Credit, degree applicable

Transfer CSU, UC

This beginning course, taught within the context of deaf culture, introduces students to signing and comprehending elementary American Sign Language (ASL). Through a visual-gestural approach and multimedia activities, students develop basic vocabulary and grammar that deal with everyday topics.

Note: This course is comparable to two years of high school sign language.

(formerly Sign Language/Interpreter Training 15)

SLAN 112 - American Sign Language II

4 units

4 hours lecture

Prerequisite: SLAN 111 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course is a continuation of the study of American Sign Language (ASL) and deaf culture. Focusing on ASL structure and grammar used by native signers, students will develop fluency at the intermediate level.

Note: The prerequisite for this course is comparable to two years of high school sign language.

(formerly Sign Language/Interpreter Training 16)

SLAN 113 - American Sign Language III

4 units

4 hours lecture

Prerequisite: SLAN 112 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course is a continuation of the study of American Sign Language (ASL) II and deaf culture. Further study of vocabulary, structure, and narrative techniques will help students develop language fluency to discuss abstract ideas and environments outside the classroom.

(formerly Sign Language/Interpreter Training 17A)

SLAN 114 - American Sign Language IV

4 units

4 hours lecture

Prerequisite: SLAN 113 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course, taught within the context of deaf culture, is a continuation of the study of American Sign Language (ASL) III. Further study of conversational and narrative techniques for advanced practice will help students develop language fluency at the advanced level. This course provides an expanded review of ASL vocabulary, syntactical structures, grammatical patterns and current linguistic research.

(formerly Sign Language/Interpreter Training 17B)

SLAN 115 - American Sign Language V

4 units

4 hours lecture

Prerequisite: SLAN 114 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course builds on the cultural competence and language skills developed in American Sign Language (ASL) IV and are designed for students to strengthen both conversational and formal ASL skills. In addition, advanced work is presented in ASL linguistics, deaf culture, specialized vocabulary and fingerspelling.

SLAN 120 - Fingerspelling and Numerical Concepts

1 unit

3 hours lab

Prerequisite: SLAN 111 with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course is designed to provide beginning and advanced practice with the sign language component known as fingerspelling. Skill development for expressive and receptive fingerspelling, numerical concepts, and lexicalized signs will enhance the student's ability to comprehend and utilize fingerspelling with accuracy and clarity.

Note: Pass/no pass only.

(formerly Sign Language/Interpreter Training 214)

SLAN 130 - Deaf Culture

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 84

Credit, degree applicable

Transfer CSU, UC

This course is designed to explore the anthropologic, political, and linguistic aspects of the culture of the deaf. Discussion and topics will provide the student with an understanding of the issues of being a deaf individual in a hearing world and trends of the deaf culture.

(formerly Sign Language/Interpreter Training 202)

SLAN 131 - Perspective on Deafness

3 units

3 hours lecture

Recommended Preparation: ENGL B

Credit, degree applicable

Transfer CSU

In this course, students will explore the realm of deafness from both a hearing and deaf perspective. Current topics and issues include sign language, language acquisition, educational trends, experiments and research. Students will gain an understanding of cultural implications of deafness. Causes of deafness and modern technological advances are explored.

(formerly Sign Language/Interpreter Training 201)

SLAN 210 - American Sign Language to English Interpreting I

2 units

2 hours lecture, 2 hours lab

Prerequisite: SLAN 115 and SLAN 200 with a minimum grade of C in prerequisite

Credit, degree applicable

Transfer CSU

This course provides beginning skills for interpreting from signed messages into written and spoken English. Signed texts will be analyzed for language use and meaning. Translation, consecutive, and simultaneous interpreting will be studied and practiced. Students will begin to develop skills to become culturally sensitive, ethical, and professional interpreters.

Note: This course is recommended to be taken with SLAN 211.

SLAN 211 - English to American Sign Language Interpreting I

2 units

2 hours lecture, 2 hours lab

Prerequisite: SLAN 115 and SLAN 200 with a minimum grade of C in prerequisite

Credit, degree applicable

Transfer CSU

This course provides beginning skills for interpreting from English into sign language. Written and spoken English texts will be analyzed for language use and meaning. Translation, consecutive, and simultaneous interpreting will be studied and practiced. Students will begin to develop skills to mediate linguistically and culturally between deaf and hearing individuals, and to ethically apply these skills.

Note: This course is recommended to be taken with SLAN 210.

SLAN 220 - American Sign Language to English Interpreting II

2 units

2 hours lecture, 2 hours lab

Prerequisite: SLAN 210 with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course is a continuation of American Sign Language (ASL) to English I and provides intermediate knowledge and skill development in simultaneous and interactive sign to voice interpreting. Topics include continued study of discourse analysis, the interpreting process, ethical and cultural considerations, and linguistic mediation techniques.

Note: This course is recommended to be taken with SLAN 221.

SLAN 221 - English to American Sign Language Interpreting II

2 units

2 hours lecture, 2 hours lab

Prerequisite: SLAN 211 with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course is a continuation of English to American Sign Language I and provides intermediate knowledge and skill development in simultaneous and interactive voice to sign interpretation and transliteration. Topics include continued study of discourse analysis, the interpreting process, and ethical demands and controls. Further study of linguistic and cultural mediation will also be explored.

Note: This course is recommended to be taken with SLAN 220.

SLAN 230 - Sign Language Interpreting III

2 units

2 hours lecture, 2 hours lab

Prerequisite: SLAN 220 and SLAN 221 with a minimum grade of C in prerequisite

Credit, degree applicable

Transfer CSU

This course is an advanced study of the interpretation process. Intensive skill development in interpreting from English to American Sign Language (ASL) and ASL to English requires advanced cognitive and linguistic skills. Discourse analysis of various communication genres and specialized settings will be studied, along with a continued focus on ethics and cultural mediation.

SSCI 101 - Introduction to Social Sciences

3 units

3 hours lecture

Recommended Preparation: Eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This course introduces students to the fields of study that comprise the social sciences and their interrelationship. Students will be introduced to the basic theories and methods of social science disciplines and how their contributions facilitate our understanding of the social and cultural worlds humans inhabit and the problems experienced by contemporary societies. This course also exposes students to the concepts and techniques that are used in social science research and in career choices available to students pursuing a degree in the social sciences.

SSCI 103 - Introduction to Social Justice Studies

3 units

3 hours lecture

Recommended Preparation: Eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This course introduces students to social justice theories and the historical and contemporary responses to inequality and injustice. The role of imbalances of power in society, social movements, culture, politics and institutions will be discussed. The course also explores a broad range of issues including notions of inequality based on race, class, gender, sexuality and issues related to environmental and criminal justice and human rights. Diverse theories and practical applications of social justice and social movements that have been made over time to remedy social injustice will be examined.

SOCI 101 - Introduction to Sociology

3 units

3 hours lecture

Prerequisite: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course introduces students to the major theoretical perspectives, concepts, and areas of study in sociology. It critically examines the relationship between the social environment and human behavior, specifically on how social forces such as race, gender, sexuality, age, and social class shape our everyday lives. In addition to learning sociological theories and research methods, students gain an understanding of sociological concepts such as culture, socialization, social institutions, deviance, stratification, and social change.

SOCI 101H - Honors Introduction to Sociology

3 units

3 hours lecture

Prerequisite: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This honors course, intended for students in the Honors Transfer Program, introduces students to the major theoretical perspectives, concepts, and areas of study in sociology. It critically examines the relationship between the social environment and human behavior, specifically on how social forces such as race, gender, sexuality, age, and social class shape our everyday lives. In addition to learning sociological theories and research methods, students gain an understanding of sociological concepts such as culture, socialization, social institutions, deviance, stratification, and social change. This course is enriched through extensive, rigorous reading, writing, and research assignments.

Note: Students may take either SOCI 101 or Sociology 101H. Duplicate credit will not be awarded

SOCI 102 - The Family

3 units

3 hours lecture

Recommended Preparation: SOCI 101 eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course will provide students with an overview of the sociological perspective on the institution of family. Both historical and contemporary aspects of singlehood, courtship, mate selection, love, cohabitation, marriage, and divorce will be examined. Components of family life including gender socialization, parenting styles, communication, and conflict resolution will be analyzed using various theoretical perspectives. Emphasis will be placed on examining diverse family structure and relationships as well as how family experiences are shaped by social class, race, ethnicity, gender, and sexual orientation.

SOCI 104 - Social Problems

3 units

3 hours lecture

Recommended Preparation: SOCI 101 eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

In this course, students explore various social problems from a sociological perspective. Students apply sociological theories and concepts to examine social problems related to race, gender, sexuality, age, and social class. Problems experienced in our social institutions such as the family educational system, criminal justice system, healthcare, media, and environment are analyzed. Using a 'sociological imagination,' students explore potential solutions and strategies to address contemporary social problems at both micro and macro levels.

SOCI 107 - Issues of Race and Ethnicity in the United States

3 units

3 hours lecture

Recommended Preparation: SOCI 101 eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

In this course, students examine issues of race and ethnicity in the United States from a sociological perspective. Sociological concepts and theories are used to analyze the current and historical experiences of groups, which are defined in racial and ethnic terms, and to assess how these definitions and experiences influence the current status and attainments of these groups in American society.

Note: This course is only offered in the fall semester.

SOCI 108 - Global Perspectives on Race and Ethnicity

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A, SOCI 101 or SOCI 107 or ANTH 2

Credit, degree applicable

Transfer CSU, UC

In this course, students will examine ethnic groups around the world using concepts of race, ethnicity and minority status. Multiple theoretical perspectives will be used to examine the conditions under which certain ethnic groups have been designated with minority group status. Focus is given to the reactions of these groups to this designation, and the patterns of interaction between minority groups and dominant groups. Emphasis is on current situations involving minority-dominant group relations around the world and the historical conditions influencing them.

Note: This course is only offered in the spring semester.

SOCI 109A - Introduction to Statistics and Data Analysis for the Behavioral Sciences

4 units

3 hours lecture, 3 hours lab

Prerequisite: PSYC 5 or PSYC 5H or SOCI 101 and MATH 73 or MATH 80 with a minimum grade of C in prerequisite

Credit, degree applicable

Transfer CSU, UC*

Students are taught standard descriptive and inferential statistics for summarizing sample data and estimating population parameters. All aspects of significance testing are emphasized: hypotheses, models, calculations, interpretations, and criticisms. Students are also taught to review scientific articles critically and to write APA-style manuscripts.

Note: The maximum UC credit allowed for students completing Sociology 109 and PSYC 9A or Sociology 109 and MATH 150 is one course. This course is only offered in the fall semester. Note: Sociology 109A is the same course as PSYC 9A.

SOCI 109B - Research Methods in the Behavioral Sciences

4 units

3 hours lecture, 3 hours lab

Prerequisite: MATH 150 or MATH 150H or SOCI 109A or PSYC 9A with a minimum grade of C in prerequisite

Credit, degree applicable

Transfer CSU, UC*

This course is centered on the philosophy of science in general and the scientific method in particular. Students develop individual research studies with these elements: literature review, hypothesis, design and method, data collection and analysis, and discussion, oral presentation, and manuscript preparation (APA Publication Style).

Note: Sociology 109B is the same course as PSYC 9B.

SOCI 110 - Introduction to Social Work

3 units

3 hours lecture

Recommended Preparation: SOCI 101

Credit, degree applicable

Transfer CSU

This course introduces students to the field and profession of social work. Following a generalist model of practice within an ecological framework, students will learn about the historical influences that shaped the development of the social work profession as well as its core ethics and values, paying close attention to the missions of social justice and cultural competency. Course content will explore central theoretical influences, the functions and roles of social work practitioners, the various social service delivery systems and fields of practice social workers typically work in as well as populations that social workers typically serve.

SOCI 112 - Introduction to Criminology

3 units

3 hours lecture

Recommended Preparation: SOCI 101 and eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course introduces students to the scientific analysis of crime and criminality. Sociological concepts and theories are used to analyze the nature, extent, and cause of crime theoretical explanations for criminal behavior will be discussed. The dynamics of law, social control, treatment processes, and victimology will be evaluated.

Note: This course is only offered in the fall semester.

SOCI 113 - Gender and Society

3 units

3 hours lecture

Recommended Preparation: SOCI 101 and eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

Through this course, students will explore the concepts of sex and gender from a sociological perspective. Course content will examine shifts in attitudes, the social construction, and the importance of gender, both femininities and masculinities, in our everyday lives. Students will examine the methods sociologists use to study gender as well as how gender shapes and is shaped by the family, work, education, politics, media, the criminal justice system, health, religion, interaction, and performance. This course also analyzes the interlocking nature of gender with other major organizing principles of life such as race, class, age, and sexuality.

SOCI 115 - Sociology of Death and Dying

3 units

3 hours lecture

Recommended Preparation: SOCI 101 and eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This course is a sociological approach to investigating death, dying, and bereavement processes in contemporary society. Students will compare the concept of death historically, socially, psychologically, and cross-culturally. Current legal, medical, and ethical issues related to death and dying, hospice, palliative care, end-of-life issues, violent deaths, and mass killings are also discussed.

SOCI 118 - Sociology of Sexualities

3 units

3 hours lecture

Recommended Preparation: SOCI 101 and eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This course examines how and why sexuality matters in society at both individual and institutional levels. It addresses diverse sexualities using sociological theories, methodological processes, and an intersectional approach involving race/ethnicity, class, and gender. Students will utilize a sociological lens to assess the relationship between historical socio-sexual contexts and contemporary sexualities.

SPAN 1 - Elementary Spanish I

4 units

5 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC*

This course introduces students to the development of skills for language acquisition in speaking, listening, reading, and writing linguistically appropriate Spanish. Students are also introduced to the cultural background of the language, including relationships among cultural practices and perspectives and the general aspects of everyday life. Technological support includes videos, DVDs, audio CDs, and internet access to publishers' websites for tutoring and other support.

Note: The maximum UC credit allowed for students completing Spanish 1 and SPAN 52A and SPAN 52B is four units. This course is comparable to two years of high school Spanish.

SPAN 1H - Honors Elementary Spanish I

4 units

5 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU

This honors course, intended for students in the Honors Transfer Program, introduces students to the development of skills for language acquisition in speaking, listening, reading, and writing linguistically appropriate Spanish. Students are also introduced to the cultural background of the language, including relationships among cultural practices and perspectives and the general aspects of everyday life. Technological support includes videos, DVDs, audio CDs, and internet access to publishers' websites for tutoring and other support. This honors course will be enriched through limited class size, oral presentations, expanded assignments and participation in cultural activities. This course is enriched through extensive, rigorous reading, writing, and research assignments.

Note: Students may take either SPAN 1 or Spanish 1H. Duplicate credit will not be awarded.

SPAN 2 - Elementary Spanish II

4 units

5 hours lecture

Prerequisite: SPAN 1 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC

This course, taught within the context of Spanish and Latin-American cultures, is a continuation of the study of elementary Spanish with an emphasis on listening, speaking, reading and writing. Students improve their pronunciation and speaking skills along with their understanding of spoken Spanish. Computer audio, and video programs are to reinforce the language skills acquired in the classroom.

Note: The prerequisite for this course is comparable to two years of high school Spanish.

SPAN 3 - Intermediate Spanish I

4 units

5 hours lecture

Prerequisite: SPAN 2 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC

This intermediate course, taught within the context of Spanish and Latin American culture, emphasizes the study of the essentials of Spanish grammar and the fundamentals of formal Spanish composition. Through oral and written practice, students expand their Spanish vocabulary and use of idiomatic expressions. Student read materials of representative Spanish and Latin American authors.

Note: The prerequisite for this course is comparable to three years of high school Spanish.

SPAN 4 - Intermediate Spanish II

4 units

5 hours lecture

Prerequisite: SPAN 3 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC

This intermediate course, taught within the context of Spanish and Latin American culture, is a continuation of the study of essential Spanish grammar and formal composition. Through oral and written practice, students further expand their Spanish vocabulary and use of idiomatic expressions to express more complex ideas. Students read materials of representative Spanish and Latin American authors and participate in daily conversations.

Note: The prerequisite for this course is comparable to four years of high school Spanish.

SPAN 5 - Advanced Spanish I

3 units

3 hours lecture

Prerequisite: SPAN 4 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC

This advanced course, taught within the context of Spanish and Spanish-American culture, is a survey of literature written by Spanish and Spanish-American writers. Students read and summarize the works of representative Spanish and Spanish-American writers to acquire fluency in the language. Written Spanish, with an emphasis on vocabulary building and functional grammar, is also included.

SPAN 6 - Advanced Spanish II

3 units

3 hours lecture

Prerequisite: SPAN 5 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC

This advanced course, taught within the context of Spanish and Spanish-American culture, introduces students to Spanish and Spanish-American literary criticism. Students learn how to write critically about the works of representative Spanish and Spanish-American writers to acquire fluency in the language. Written Spanish, with an emphasis on vocabulary building and functional grammar, is also included.

SPAN 21 - Beginning Conversational Spanish

2 units

2 hours lecture

Prerequisite: SPAN 1 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

This course is designed to help students develop competency in Spanish oral expression, oral comprehension, pronunciation, and conversational strategies.

(formerly Spanish 21ab)

SPAN 22 - Intermediate Conversational Spanish

2 units

2 hours lecture

Prerequisite: SPAN 2 and SPAN 21 with a minimum grade of C in prerequisite or equivalent

Credit, degree applicable

Transfer CSU, UC

This course is designed for the intermediate student to develop Spanish language fluency in oral expression, increase oral comprehension, and improve pronunciation. Conversational topics are based upon the daily experiences and cultural life of the ethnic areas involved with the Spanish language.

(formerly Spanish 22ab)

SPAN 52A - Spanish for Native Speakers I

4 units

5 hours lecture

Prerequisite: SPAN 2 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC*

This course is designed for students with a native-speaking knowledge of Spanish and who have little or no formal instruction in the Spanish language. Students develop the cultural and linguistic ability to use correct spoken and written Spanish free from regionalisms and Anglicisms. Students learn to correct faulty Spanish speech habits, improve vocabulary, and acquire skills in writing. Students also become familiar with the similarities and differences existing within and between the cultures of Spain, as well as the Caribbean and North and Central American Spanish-speaking countries.

Note: The maximum UC credit allowed for students completing SPAN 1 and Spanish 52A and SPAN 52B is four units.

SPAN 52B - Spanish for Native Speakers II

4 units

5 hours lecture

Prerequisite: SPAN 52A with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC*

This course is designed for students with a native-speaking knowledge of Spanish and who have had some formal instruction in the Spanish language. Students strengthen their cultural and linguistic ability to use correct spoken and written Spanish free from regionalisms and Anglicisms. Students master the ability to correct faulty Spanish speech habits, improve vocabulary, and acquire skills in writing. Students deepen their understanding of similarities and differences existing within and between the cultures of Central and South American Spanish speaking countries.

Note: The maximum UC credit allowed for students completing SPAN 1 and SPAN 52A and 52B is four units.

SPAN 99 - Independent Study

1-3 units

hours to be arranged

Enrollment Limitation: two courses in Spanish with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work

Credit, degree applicable

Transfer CSU*

This course provides special advanced studies in a subject field of Spanish not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Spanish projects (54 hours per unit).

Note: *Transfer limitations apply. For eligibility requirements, go to www.elcamino.edu/admissions/credit.asp (formerly Spanish 99abc)

SUPV 27 - Oral Business Communications

3 units

3 hours lecture

Recommended Preparation: ENGL B

Credit, degree applicable

Transfer CSU

In this course, students will compose and deliver original business presentations with focus on effective speaking in business situations. The course will focus on techniques of research, preparation, presentation, and evaluation. Various business formats including interviewing, delivering formal business presentations, speaking within a small group and interpersonal conversations, impromptu speaking and briefings will be covered.

Note: Supervision 27 is the same course as BUS 29.

THEA 95 - Cooperative Work Experience Education

2-4 units

hours to be arranged

Enrollment Limitation: Employment or volunteer work in a position related to the student's major or career goal by the second week of the semester. Completion of or current enrollment in one course from the major.

Credit, degree applicable

Transfer CSU*

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Theatre Arts field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

Note: *Transfer limitations apply. The total units earned for Cooperative Work Experience Education may not exceed 16 units. (formerly Theatre 95abcd)

THEA 99 - Independent Study

1-3 units

hours to be arranged

Enrollment Limitation: two courses in Theatre with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work

Credit, degree applicable

Transfer CSU

This course provides special advanced studies in a subject field of Theatre not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Theatre projects (54 hours per unit).

Note: *Transfer limitations apply. For eligibility requirements, go to www.elcamino.edu/admissions/credit.asp (formerly Theatre 99abc)

THEA 103 - Theatre Appreciation

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course is a survey of theatre focusing on the theory and practice of modern theatre. Topics include acting, directing, design of scenery, architecture, lighting, costuming, makeup, stage properties, and the American musical. Elements of playwriting, critical analysis, and career opportunities are also covered. Attendance is required at selected theatre events at El Camino College presented by the Theatre Department, El Camino College Center for the Arts, and selected master classes related to professional events.

(formerly Theatre 1)

THEA 104 - Dramatic Literature

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

In this course, students survey selected plays from classical tragedy and comedy to contemporary drama. Emphasis is placed on reading, discussing, and critically analyzing dramatic literature influenced by social and cultural forces. Attendance at selected local theatre events is required.

(formerly Theatre 4)

THEA 113 - Introduction to Acting

3 units

2 hours lecture, 3 hours lab

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

Designed for the non-theatre major, this course introduces the fundamental elements and techniques of acting. Emphasis is placed on the development of effective acting techniques through physical and vocal exercises, improvisation, and pantomime, culminating in the performance of scenes from selected plays. Attendance is required at selected theatre events.

(formerly Theatre 8)

THEA 114 - Fundamentals of Acting

3 units

2 hours lecture, 3 hours lab

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course is a study of the techniques, styles, and disciplines of acting. The student is provided theory and practical experience with varied characterizations. Emphasis is placed on individual growth and acquired skills demonstrated through play and character analysis followed by presentation of scenes from contemporary realistic plays. Attendance is required at selected theatre events offered by the El Camino College Center for the Arts and in the community.

(formerly Theatre 14A)

THEA 175abcd - Student Performance Production Workshop

1 unit

3 hours lab per week to be arranged

Recommended Preparation: completion of or concurrent enrollment in the following: 1. Student performers: THEA 113 or THEA 114 2. Student directors: THEA 240

Credit, degree applicable

Transfer CSU, UC

This course is a theatre workshop in which students participate in a production under faculty supervision as directors or performers. Students will demonstrate their theatrical skills and be ranked on their acting and/or directorial abilities in a live theatrical performance through participation in the Kennedy Center American College Theater Festival (KCACTF) competition.

(formerly Theatre 75abcd)

THEA 184 - Stagecraft

3 units

2 hours lecture, 3 hours lab

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This course emphasizes both theoretical and practical experience in the technical aspects of play production, including scene design, set construction, scenery painting, rigging and equipment, properties, and the manipulation of stage scenery. Students participate in shop procedures and practices, safe tool usage, material selection, and fabrication methods. Attendance and participation in selected theatre events at El Camino College is required.

(formerly Theatre 84)

THEA 185 - Introduction to Stage Lighting

3 units

2 hours lecture, 3 hours lab

Credit, degree applicable

Transfer CSU, UC

This course emphasizes the operation of stage lighting equipment, planning and rigging of lighting units, operation of control systems and related equipment, light sources, stage electricity, color in light, and the design of stage lighting. Students must attend selected theatre events at El Camino College Center for the Arts.

(formerly Theatre 90)

THEA 188 - Fundamentals of Stage Makeup

3 units

2 hours lecture, 3 hours lab

Credit, degree applicable

Transfer CSU, UC

This course is a study of basic makeup tools, materials, techniques and methods used in creating various character effects for stage and television. Emphasis is placed on the acquisition of practical skills from assignments that cover straight, corrective, and character makeup, including the effects of aging, beards, hair styles, fantasy, and facials distortions.

(formerly Theatre 88)

THEA 189 - Costuming for the Stage

3 units

2 hours lecture, 3 hours lab

Credit, degree applicable

Transfer CSU, UC

This course covers the theory and practice of costuming for the stage, including historical background, basic costume design techniques, cutting, fitting, sewing, patternmaking, fabric design and dyeing, proper use and maintenance of equipment, and the duties of wardrobe crews and chiefs. Students must attend selected theatre events at El Camino College Center for the Arts.

(formerly Theatre 94)

THEA 197abcd - Technical Theatre Production

1 unit

minimum 3 hours lab per week to be arranged

Credit, degree applicable

Transfer CSU, UC

This course is a performance and rehearsal laboratory designed to support the public presentations of the Theatre Department. Emphasis will be placed on the roles and production needs of the technical theater team including stage management, properties, costume, sound, lights, makeup, and deck crew. Students will have the opportunity to demonstrate their technical theater skills and be ranked on their ability to successfully crew a live performance through participation in the Kennedy Center American College Theater Festival (KCACTF) competition.

(formerly Theatre 97abcd)

THEA 214A - Intermediate Acting

3 units

2 hours lecture, 3 hours lab

Prerequisite: THEA 114 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course is a continuation of THEA 114 and focuses on continued study in the methodology and process of acting for the stage and includes in-depth character study through use of personalization skills, imagery, environment, stage life, situation and motivation, given and imaginary circumstances, emotional and sense-memory recall, obstacles and objectives, through-line of action and character biographies. Attendance is required at selected theatre events at El Camino College Center for the Arts and in the community. This course is required for the theatre major.

(formerly Theatre 14B)

THEA 215 - Improvisation

2 units

1 hour lecture, 3 hours lab

Recommended Preparation: THEA 113 or THEA 114

Credit, degree applicable

Transfer CSU, UC

This course introduces students to improvisational acting through games, exercises, and unrehearsed scenes. Emphasis is placed on working without a script, trusting one's instincts, and expanding one's expressive range.

(formerly Theatre 15abcd)

THEA 216 - Acting: Audition and Cold Reading

3 units

2 hours lecture, 3 hours lab

Prerequisite: THEA 114 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

This course prepares students to audition for university placement or professional theatre. Topics will include interpreting and developing a character at the audition-ready level, completion of a portfolio and resume, interpreting assigned scripts according to the Shurtleff "Guideposts" for successful cold reading, and preparation and maintenance of at least three monologues for auditions.

(formerly Theatre 16abcd)

THEA 217 - Acting Shakespeare

3 units

2 hours lecture, 3 hours lab

Prerequisite: THEA 113 or THEA 114 with a minimum grade of C in prerequisite or equivalent

Credit, degree applicable

Transfer CSU, UC

This course focuses on the technique of understanding and playing selected works of Shakespeare through research, exercises and scene study. The student's training will include textual analysis, historical research, scansion, imagery, vocal technique and period movement, song and dance.

(formerly Theatre 22ab)

THEA 240 - Fundamentals of Stage Direction

3 units

2 hours lecture, 3 hours lab

Prerequisite: THEA 214A with a minimum grade of C or concurrent enrollment

Credit, degree applicable

Transfer CSU, UC

This course is a study of the director's approach to play analysis, dramatic and aesthetic values, thematic choices, characterizations, casting, rehearsal techniques, and the organization of performances. The final project is the preparation and presentation of a ten-minute one-act play complete with promptbook, master movement plan, ground plan, rehearsal schedule, prop list, and a complete written play analysis. Attendance is required.

(formerly Theatre 40A)

THEA 270abcd - Beginning Theatre Production

1 unit

3 hours lab per week to be arranged

Enrollment Limitation: audition

Credit, degree applicable

Transfer CSU, UC

This theatre production course is an acting workshop in which students learn performance skills and rehearsal discipline through active participation in a major theatrical production. Students will demonstrate their performance skills and be ranked on their acting abilities in a live performance through participation in the Kennedy Center American College Theater Festival (KCACTF) competition.

(formerly Theatre 70abcd)

THEA 274abcd - Musical Theatre Production

1 unit

3 hours lab per week to be arranged

Enrollment Limitation: audition

Credit, degree applicable

Transfer CSU, UC

This course is a musical theater workshop. Students learn performance skills and rehearsal discipline through active participation in a live major musical theater production that integrates singing, dancing, and acting. Students will have the opportunity to demonstrate and be ranked on their singing, acting, and dancing skills and insights into creating a musical theater character through competition in the Kennedy Center American College Theater Festival (KCACTF).

(formerly Theatre 74abcd)

THEA 295 - Industry Analysis and Portfolio Planning for the Entertainment Lighting Industry

2 units

2 hours lecture

Credit, degree applicable

Transfer CSU

This course analyzes the various sectors of the entertainment lighting industry and provides instruction in portfolio planning.

(formerly Theatre 195)

THEA 297ab - Advanced Technical Theatre Production

1 unit

minimum 3 hours lab per week to be arranged

Prerequisite: four semesters of THEA 197abcd with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course is an advanced rehearsal and performance laboratory to support the public presentations of the Theater Department. Emphasis will be placed on the role of the technical theater production needs focusing on stage management and including properties, costume, sound, lights, makeup, and deck crew. Students will have the opportunity to demonstrate and be ranked on their technical theater skills and abilities to successfully crew a live performance through competition in the Kennedy Center American College Theater Festival (KCACTF).

(formerly Theatre 98ab)

TUTR 200 - Theory and Practice of Tutoring

1 unit

1 hour lecture

Credit, degree applicable

Transfer CSU

This course is designed for students who intend to be tutors. It meets the College Reading and Learning Association training program requirements and is designed to help student tutors learn to communicate clearly and effectively with students needing academic assistance. Course content includes learning theories, tutorial techniques, program procedures and responsibilities, and tutoring practice.

Note: Pass/no pass only. To be considered for El Camino College employment as a tutor, students need to have completed the course they wish to tutor with a final grade of B or better. The recommendation of the appropriate instructor is also necessary.

WELD 1 - Introduction to Welding Process

8 units
5 hours lecture, 10 hours lab
Credit, degree applicable
Transfer CSU

In this course, students are introduced to welding processes with a primary focus on developing manipulative skills. Welding processes covered include oxy-acetylene, plasma arc, shielded metal arc, gas tungsten arc, gas metal arc, and flux cored arc. The course also includes a study of occupational safety, weld symbols, print reading, metal fabrication, and joint design.

WELD 1A - Introduction to Multi-Process Welding

4 units
2.5 hours lecture, 5 hours lab
Credit, degree applicable
Transfer CSU

This course is designed to provide students with basic performance qualification skills needed for employment in manufacturing and the maintenance industry. Students are introduced to multiple processes with a primary focus on developing manipulative skills commonly used in manufacturing. Welding processes covered include oxyacetylene cutting, plasma arc cutting, Shielded Metal Arc Welding (SMAW), Gas Tungsten Arc Welding (GTAW), and Gas Metal Arc Welding (GMAW). The course also includes a study of occupational safety, weld symbols, and joint design.

Note: Letter grade or pass/no pass option

WELD 1B - Advanced Welding for Manufacturing

4 units
2.5 hours lecture, 5 hours lab
Prerequisite: WELD 1A or WELD 10A with a minimum grade of C in prerequisite or equivalent
Credit, degree applicable
Transfer CSU

This course continues the development of students' theory and practice of their manual and semiautomatic welding skills, joining ferrous and non-ferrous metals for manufacturing technology. Welding processes include Gas Tungsten Arc Welding (GTAW), spray transfer, aluminum Gas Metal Arc Welding (GMAW) and Dual- Shield Flux Core Arc welding (FCAW-G). The course is an in-depth study into advanced manufacturing processes, work procedure specifications, occupational safety and calculations of material cost and sizes. Additional topics include fractional, decimal and metric conversions.

Note: Letter grade or pass/no pass option

WELD 10A - Introduction to Shielded Metal Arc Welding (SMAW)

4 units
2.5 hours lecture, 5 hours lab
Credit, degree applicable
Transfer CSU

This course is designed for the beginning student. Students will develop manipulative skills using the oxygas and Shielded Metal Arc Welding (SMAW) processes. Emphasis is placed on safety procedures, use of manual and semi-automatic welding equipment, welding techniques, electrodes and joints. Practical aspects of Flux Core Arc Welding (FCAW) process will be introduced.

Note: Letter grade or pass/no pass option.

WELD 10B - Intermediate Shielded Metal Arc Welding (SMAW)

4 units
2.5 hours lecture, 5 hours lab
Recommended Preparation: WELD 10A
Credit, degree applicable
Transfer CSU

This course is designed for the intermediate student. Students will enhance their skills by developing their technique in the open root processing using Shielded Metal Arc Welding (SMAW) electrodes. The course emphasizes the theory and practice of joint preparation, Complete Joint Penetration (CJP), and various cover pass processes including semi-automatic arc welding.

Note: Letter grade or pass/no pass option.

WELD 10C - Advanced Certification and Career Preparation Lab

2 units

6 hours lab

Prerequisite: WELD 10B with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

This advanced level welding lab is third of a series specifically designed for students to refine their welding skills in E7018 electrodes used in structural steel Shielded Metal Arc Welding (SMAW), Flux Core Arc Welding (FCAW), and E6010 electrodes used in open root welding of ferrous metals in the vertical (3G) and overhead (4G) position. Taken in succession, this course prepares students to advance to level III in American Welding Society (AWS) national skill standards.

Note: Letter grade or pass/no pass option.

WELD 15 - Basic Welding for Allied Fields

3 units

2 hours lecture, 4 hours lab

Credit, degree applicable

Transfer CSU

This is a basic course to support trade skills for students in allied fields. The course introduces students to welding equipment, nomenclature, safety, plasma and mechanical cutting, metallurgical exploration of ferrous and nonferrous material, ductility of materials, effects of coldworking and heating treating.

(formerly Welding 15ab)

WELD 20A - Flux Core and Gas Metal Arc Welding

4 units

2.5 hours lecture, 5 hours lab

Prerequisite: WELD 10C or WELD 23 with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course is designed to develop semiautomatic welding skills. Welding processes include Gas Metal Arc Welding (GMAW) and Flux Cored Arc Welding (FCAW). The course offers an in-depth study into work procedure specifications, operation and maintenance of constant voltage welding machines, occupational safety, and D1.1 code semi-automatic classifications/specifications. Emphasis is placed on the theory and practice of joint preparation, complete joint penetration (CJP), and various cover pass processes utilizing semi-automatic arc welding.

Note: Letter grade or pass/no pass option.

WELD 23 - Advanced Arc Welding Specialty Lab

2 units

6 hours lab

Prerequisite: Welding 10 with a minimum grade of C in prerequisite or equivalent

Credit, degree applicable

Transfer CSU

This advanced level welding course is designed to further develop advanced specialized welding skills in the structural, sheet metal, and construction industries. This course is for the advanced arc welding student preparing for the American Welding Society (AWS) Structural Steel practical exam and certification.

Note: Letter grade or pass/no pass option.

(formerly Welding 23abc)

WELD 28 - American Welding Society (AWS) D1.1 Certification Test Preparation

3 units

3 hours lecture

Prerequisite: WELD 10C or WELD 23 with a minimum grade of C in prerequisite or equivalent

Credit, degree applicable

Transfer CSU

This course prepares the student to pass the written examination of the Los Angeles City Department of Building and Safety Structural Steel American Welding Society (AWS) D1.1 examination. Both the midterm and final examinations will be administered under same testing conditions as the actual Los Angeles City written exam.

Note: Letter grade or pass/no pass option.

(formerly Welding 28ab)

WELD 29 - Blueprint Reading

3 units
3 hours lecture
Credit, degree applicable
Transfer CSU

This course is designed to provide principles of reading and interpreting basic industrial prints and shop drawings as applied to the welding trade. Emphasis is placed on shape identification, nomenclature, and welding symbols.

WELD 40A - Introduction to Gas Tungsten Arc Welding (GTAW)

3 units
2 hours lecture, 4 hours lab
Credit, degree applicable
Transfer CSU

This course is designed for the beginning student. Students develop manipulative skills using the Gas Tungsten Arc Welding (GTAW) process on ferrous and non-ferrous alloys. Related classroom instruction covers technical data pertaining to this welding process with special emphasis on operational parameters of inverter type machines. This course begins preparation for eligibility for American Welding Society (AWS) D17.1 certification.

(formerly Welding 40)

WELD 40B - Intermediate Gas Tungsten Arc Welding (GTAW)

3 units
2 hours lecture, 4 hours lab
Recommended Preparation: WELD 40A
Credit, degree applicable
Transfer CSU

This is an intermediate course in Gas Metal Arc Welding (GTAW). Special emphasis is placed on the welding of ferrous and non-ferrous metals in the various positions and building skill development in GTAW. Students continue to prepare for the American Welding Society (AWS) D17.1 certification.

Note: Letter grade or pass/no pass option.

WELD 40C - Advanced Gas Tungsten Arc Welding (GTAW) Skills Lab

2 units
6 hours lab
Prerequisite: WELD 40B with a minimum grade of C or equivalent
Credit, degree applicable
Transfer CSU

This course is designed to develop the advanced specialized skills used within the structural steel, sheet metal, and aerospace manufacturing industries using the Gas Tungsten Arc Welding (GTAW) process. Repair of cast welding and tooling maintenance will be introduced. Students will develop various specialized skills that will help them achieve students' goals and attain the necessary traits that employers are seeking. This course prepares students for American Welding Society (AWS) D17.1 certification.

Note: Letter grade or pass/no pass option.

WELD 45 - Structural Fabrication

5 units
4 hours lecture, 4 hours lab
Prerequisite: WELD 1 or Welding 21 with a minimum grade of C in prerequisite
Credit, degree applicable
Transfer CSU

This welding course focuses on skills required to fabricate a project from an engineering drawing to the finished product. Emphasis is placed on interpreting engineering drawings, proper use of tools and equipment, math, and shop safety.

(formerly Welding 45ab)

WELD 95 - Cooperative Work Experience Education

2-4 units

hours to be arranged

Enrollment Limitation: Employment or volunteer work in a position related to the student's major or career goal by the second week of the semester. Completion of or current enrollment in one course from the major.

Credit, degree applicable

Transfer CSU*

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Welding field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

Note: *Transfer limitations apply. The total units earned for Cooperative Work Experience Education may not exceed 16 units. (formerly Welding 95abcd)

WELD 99 - Independent Study

1-3 units

hours to be arranged

Enrollment Limitation: two courses in Welding with a minimum grade of B in each and acknowledgment by the instructor with whom student will work

Credit, degree applicable

Transfer CSU*

This course provides special advanced studies in a subject field of Welding not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Welding projects (54 hours per unit).

Note: *Transfer limitations apply. For eligibility requirements, go to www.elcamino.edu/admissions/credit.asp (formerly Welding 99abc)

WSTU 1 - Introduction to Women's Studies

3 units

3 hours lecture

Recommended Preparation: eligibility for ENGL 1A

Credit, degree applicable

Transfer CSU, UC

This interdisciplinary course introduces students to the key concepts, theoretical perspectives, and history of the field of women's studies. Feminist activism in the U.S. and the social construction of sex, gender, and sexuality will be examined. Utilizing feminist perspectives, students will analyze how gender intersects with race, ethnicity, social class, and sexuality as well as the representation, participation, and statuses of women in American institutions such as the media, workplace, and family.



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