El Camino College
2010-2011

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
# 2010-2011 Academic Calendar

## Fall Semester - 2010

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall Semester Classes Begin</td>
<td>Saturday August 28, 2010</td>
</tr>
<tr>
<td>Weekday Classes Begin</td>
<td>Monday August 30, 2010</td>
</tr>
<tr>
<td>Labor Day Holiday, Campus Closed</td>
<td>Monday September 6, 2010</td>
</tr>
<tr>
<td>First Day to Apply for Graduation and Certificates {Fall}</td>
<td>Tuesday September 7, 2010</td>
</tr>
<tr>
<td>Last Day to Add {Full Semester Classes}</td>
<td>Friday September 10, 2010</td>
</tr>
<tr>
<td>Last Day to Drop and be Eligible for a Refund</td>
<td>Friday September 10, 2010</td>
</tr>
<tr>
<td>Active Enrollment Census</td>
<td>Monday September 13, 2010</td>
</tr>
<tr>
<td>Last Day to Drop Without Notation on Permanent Record</td>
<td>Friday September 24, 2010</td>
</tr>
<tr>
<td>Last Day to Apply for Graduation and Certificates {Fall}</td>
<td>Friday October 15, 2010</td>
</tr>
<tr>
<td>Mid-Term Classes Begin</td>
<td>Saturday October 23, 2010</td>
</tr>
<tr>
<td>Veterans Day Holiday, Campus Closed</td>
<td>Friday November 12, 2010</td>
</tr>
<tr>
<td>Last Day to Drop with a &quot;W&quot;</td>
<td>Friday November 19, 2010</td>
</tr>
<tr>
<td>Thanksgiving Holidays, Campus Closed</td>
<td>Thurs-Sun November 25-28, 2010</td>
</tr>
<tr>
<td>Fall Semester Ends</td>
<td>Friday December 17, 2010</td>
</tr>
<tr>
<td>Winter Recess, Campus Closed</td>
<td>Thursday December 23, 2010</td>
</tr>
</tbody>
</table>

## Winter Session - 2011

Refer to Winter Schedule of Classes

## Spring Semester - 2011

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Day to Apply for Graduation and Certificates {Spring}</td>
<td>Monday January 10, 2011</td>
</tr>
<tr>
<td>Lincoln’s Day Holiday, Campus Closed</td>
<td>Friday February 11, 2011</td>
</tr>
<tr>
<td>Spring Semester Classes Begin</td>
<td>Saturday February 12, 2011</td>
</tr>
<tr>
<td>Weekday Classes Begin</td>
<td>Monday February 14, 2011</td>
</tr>
<tr>
<td>Washington’s Day Holiday, Campus Closed</td>
<td>Monday February 21, 2011</td>
</tr>
<tr>
<td>Last Day to Add {Full Semester Classes}</td>
<td>Friday February 25, 2011</td>
</tr>
<tr>
<td>Last Day to Drop and be Eligible for a Refund</td>
<td>Friday February 25, 2011</td>
</tr>
<tr>
<td>Active Enrollment Census</td>
<td>Monday February 28, 2011</td>
</tr>
<tr>
<td>Last Day to Apply for Graduation and Certificates {Spring}</td>
<td>Thursday March 3, 2011</td>
</tr>
<tr>
<td>Last Day to Drop Without Notation on Permanent Record</td>
<td>Friday March 11, 2011</td>
</tr>
<tr>
<td>Spring Recess, No Classes</td>
<td>Saturday-Friday April 9-15, 2011</td>
</tr>
<tr>
<td>Mid-Term Classes Begin</td>
<td>Saturday April 16, 2011</td>
</tr>
<tr>
<td>Last Day to Drop with a “W”</td>
<td>Friday May 13, 2011</td>
</tr>
<tr>
<td>Memorial Day Holiday, Campus Closed</td>
<td>Monday May 30, 2011</td>
</tr>
<tr>
<td>Graduation</td>
<td>Friday June 10, 2011</td>
</tr>
<tr>
<td>Spring Semester Ends</td>
<td>Friday June 10, 2011</td>
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Board of Trustees

William J. Beverly
Trustee Area Three
Mary E. Combs
Trustee Area Two
Ray Gen
Trustee Area Four
Nathaniel Jackson
Trustee Area One
Maureen O’Donnell
Trustee Area Five
Christopher Pham
Student Trustee

Administration

Thomas M. Fallo
Superintendent/President
Francisco M. Arce
Vice President, Academic Affairs
Jo Ann Higdon
Vice President, Administrative Services
Jeanie M. Nishime
Vice President, Student and Community Advancement
Lynn Solamita
Interim Vice President, Human Resources
Barbara Perez
Vice President, El Camino College Compton Center

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, Web http://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 Post Secondary Education, California State Department of Education.

Membership

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

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.

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.

Campus Police

The Campus Police Office 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 office is located on the corner of Crenshaw and Redondo Beach Boulevards in Parking Lot K. Campus Police offers lost and found services as well as an escort service between parking lots and classes. Also available is first aid as well as help in all emergency situations. The office may be telephoned directly at 310-660-3100. Traffic and parking regulations are posted throughout campus. Campus Police will issue citations to violators of these regulations. All such fines are payable to the Campus Police Office. Parking citations are a minimum of $35.

Publisher

The Catalog of Courses is published annually through the Office of Public Relations and Marketing, El Camino Community College District, 16007 Crenshaw Blvd., 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.

Non-Discrimination Policy

Non-Discrimination Policy

The El Camino Community College District is committed to providing equal opportunity in which no person is subjected to discrimination on the basis of ethnic group identification, national origin, religion, age, sex, race, color, ancestry, sexual orientation, physical or mental disability, or retaliation.
Mission Statement

El Camino College offers quality, comprehensive educational programs and services to ensure the educational success of students from our diverse community.

Vision Statement

El Camino College will be the College of choice for successful student learning, caring student services and open access. We, the employees, will work together to create an environment that emphasizes people, respect, integrity, diversity and excellence. Our College will be a leader in demonstrating accountability to our community.

Statement of Philosophy

Everything El Camino College is or does must be centered on its community. The community saw the need and valued the reason for the creation of El Camino College. It is to our community that we must be responsible and responsive in all matters educational, fiscal and social.

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.

Guiding Principles

The following guiding principles are used to direct the efforts of the District:

El Camino College must strive for distinction in everything the College does—in the classroom, in services and in human relations. Respect for our students, fellow employees, community and ourselves, must be our underlying goal.

Cooperation among our many partners including other schools and colleges, businesses and industries, and individuals is vital for our success.

Access and success must never be compromised. Our classrooms are open to everyone who meets our admission eligibility and our community programs are open to all. This policy is enforced without discrimination and without regard to gender, ethnicity, personal beliefs, abilities or background.

Strategic Initiatives

1. Offer excellent educational and student support services:
   a) Enhance college services to support student learning using a variety of instructional delivery methods and services.
   b) Maximize growth opportunities and strengthen programs and services to enhance student success.
   c) Strengthen partnerships with schools, colleges and universities, businesses and community-based organizations to provide workforce training and economic development for our community.

2. Support self-assessment, renewal, and innovation:
   a) Use student learning outcomes and assessment to continually improve processes, programs and services.
   b) Use research-based evidence as a foundation for effective planning, budgeting and evaluation processes.

3. Modernize the infrastructure to support quality programs and services:
   a) Use technological advances to improve classroom instruction, services to students and employee productivity.
   b) Improve facilities to meet the needs of students and the community for the next fifty years.
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 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 five unified and high school districts, twelve elementary school districts and nine cities - a population of nearly one million.

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 passed Measure E, a $394 million bond measure. The successful passage of this bond measure will allow 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. The money can be used only on facilities and equipment. None of it can be used for salaries or programs. A Citizen’s 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 more than 850 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 by voters in five trustee areas which comprise the college district. 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 four vice presidents. Their areas of responsibility are academic affairs, administrative services, student and community advancement, and human resources.

As the college mushroomed from an enrollment of fewer than 500 in 1946 to nearly 30,000 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 nearly 2,500 different classes offered in some 850 different programs. With more courses available during a variety of class times, students have wide flexibility in individual scheduling.

The college confers the associate degree each spring on about 1,200 students who have completed their 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 five presidents. The founding president, Forrest G. Murdock served until his retirement in 1958. He was succeeded by Dr. Stuart E. Marsee whose tenure saw 24 years of financial stability, building and growth. Retiring in 1982, he turned the campus over to Dr. Rafael Cortada. Dr. 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. Dr. 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. El Camino College today is under the leadership of Dr. Thomas M. Fallo whose direction is guiding the college through the 21st century.

Academic Year

Scholarships are awarded annually to incoming high school students, current El Camino College students and students preparing to transfer. In 2009, the Foundation provided more than $400,000 in student scholarships.

El Camino College Foundation

Since 1983, the charge of the El Camino College Foundation has been to solicit, receive, and administer private gifts, bequests, and donations to benefit students and enhance the quality of their education. With the number of students growing, the Foundation has stepped up efforts to raise funds to bridge the gap between rising demand and deepening budget constraints; the Foundation’s assets have grown to more than $7.2 million.

Aspiring to meet the needs of El Camino College’s diverse student population, the Foundation actively supports several programs that provide direct and immediate benefit to our students. Scholarships are awarded annually to incoming high school students, current El Camino College students and students preparing to transfer. In 2009, the Foundation provided more than $400,000 in student scholarships. In addition, the Foundation Book Fund Honor Loan program provides textbook vouchers for students with a financial need and helps empower our students by providing them with an opportunity to “give back” to the program once they have graduated and started their careers.

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 vital programs and services for our students, enabling them to reach their educational goals.

For more information about how you can support the El Camino College, please visit the El Camino College Foundation website at elcaminocollegefoundation.org, or contact Katie Gleason at 310-660-6040 or kgleason@elcamino.edu. The Foundation is a 501(c)(3) charitable organization. All donations are tax deductible.
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 [for example: prospective employers] except for those agencies entitled to access under the provisions of the act [for example: 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 which 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 Dean, Enrollment Services.

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 students to be left unattended or unsupervised anywhere on campus. It is the responsibility of each faculty member to inform students of this requirement.

How to Reach Us:

Toll-free 1-866-ELCAMINO – www.elcamino.edu
Area code is 310

Academic Office Telephone Numbers

Behavioral & Social Sciences .............660-3735
Business ........................................660-3770
Fine Arts .......................................660-3715
Health Sciences & Athletics ..............660-3545
Humanities ....................................660-3316
Industry & Technology ......................660-3600
Learning Resources ..........................660-3525
Mathematical Sciences .....................660-3200
Natural Sciences ...............................660-3343
Nursing ........................................660-3281

Student Services Telephone Numbers

Admissions Office .........................660-3414
Adult Re-entry Center ......................660-3558
Assessment and Testing .................660-3405
Bookstore .....................................660-3380
Campus Police .................................660-3100
Cashier’s Office ...............................660-3142
Child Development Center ............660-3720
Counseling Appointments ............660-3458
ECLA .........................................660-6707
EOP&S .........................................660-3464
Financial Aid .................................660-3493
First Year Experience/Learning Communities 660-6936
Health Center [closed Summer] ........660-3643
Inter Club Council .........................660-6399
International Students .....................660-3431
Library Circulation .........................660-3519
Library Reference ..........................660-6483
Parking Services ............................660-6769
Records Office ...............................660-3436
Registration Help Line (seasonal) ....660-6034
Scholarship Office .........................660-6541
Special Resource Center .................660-3295
Student Development ......................660-3500
Student Government .......................660-3507
Telecommunication for the Deaf (TTY) 660-3445
Transfer Center ..............................660-3408
Tutoring Center .............................660-3511
Workplace Learning .......................660-3351
Veterans Office ..............................660-3486

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.
Admission

Anyone 18 years of age or older qualifies for admission to El Camino College. If under the age of 18, you will qualify if you have 1) graduated from high school or 2) passed the California High School Certificate of Proficiency Test.

Special Part-Time or Full-Time Students

El Camino College may admit as a special part-time or special full-time 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.

Residents of other states and foreign students are subject to 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 state or federal financial aid. 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. If credit is used for high school graduation, attention is called 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 college. A separate approval must be provided for each semester, summer session, or winter session in which the student is enrolled. Concurrently enrolled students must comply with all policies, follow all procedures, and meet all requirements by the published deadlines for each semester and/or session.

District Residence Requirements

A student 18 years or older who resides in the El Camino College District 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. The residence of the student under age 18 is determined by the legal residence of the parents 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 in the active 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.

Appeal Procedure

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

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 defraying the costs of providing these services.

The mandatory general student fee will be collected at the time of registration. Students who fail to pay this required fee at the time of registration will subsequently be dropped from classes. Grades, transcripts and diplomas will be withheld and future registration restricted. The enrollment fee is $26 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 System 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 on 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, this 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 Fee

To receive a refund, students must drop their classes through the online system located in the Activities Center (first two weeks of a semester) or the Cashier’s Office or by Web or telephone according to dates published in the schedule of classes and on fee receipts.

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 before the end of the semester.

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

Those who drop a class that meets fewer than 15 weeks must drop by the end of the first full week of classes.

A refund fee not to exceed $10 may be charged for enrollment refunds.
Fee Payment Methods

Personal checks drawn on United States banks only, money orders or cash will be accepted for any fee paid. 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 $17.00 each semester to cover the operation, supervision, programs and services of the Student Health Center. There are exceptions under these conditions:

- Students receiving financial aid pursuant to Section 72252.1.
- 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 VA 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.
- 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 work-site 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 is charged an out-of-state fee of $183 for every credit unit. A citizen of another country pays a non-resident fee of $213 for every credit unit. 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 $25 (subject to change) application processing fee for out-of-country applicants.

All fees must be paid by checks 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 in the Activities Center, by telephone, by the Web, or in the Cashier’s Office according to the following schedule:

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

Refunds for the Summer and Winter sessions and for short-term courses of 8 weeks or less will be granted if classes are dropped according to the following schedule:

- During the first calendar week of the term, 100 percent of the fee will be refunded.
- During the second calendar week of the term, 50 percent of the fee will be refunded.
- During the fourth calendar week of the term, 25 percent of the fee will be refunded.

Refunds for the Summer and Winter sessions and for short-term courses of 8 weeks or less will be granted if classes are dropped according to the following schedule:

- During the first calendar week of the term, 100 percent of the fee will be refunded.
- During the second calendar week of the term, 50 percent of the fee will be refunded.
Photo Identification Card

All students are encouraged to obtain a free El Camino College identification card. These student Photo I.D. cards are available in the Activities Center Photo I.D. booth. Hours vary: please call 310-660-3593, extension 6738 for information. These cards serve as photo identification and are required for Library and lab services, campus activities, and for verification of attendance in certain classes. Student ID cards are also needed to use any campus computer.

For only $10, you may also purchase an ASB (Auxiliary Services Benefits) sticker at the Cashier’s Window located in the Administration Building. These stickers are also available at the Activities Center and Marsee Auditorium Ticket Office. This ASB purchase provides students, as well as faculty and alumni, a number of discounts throughout the district, such as automotive and clothing accessories, fast food, and movie tickets. Discount tickets for Disneyland, Knott’s Berry Farm and other amusement parks are also available. On campus, the ASB sticker provides a 10% discount on clothing at the bookstore and free admission to all campus athletic events and ASO dances as well as the opportunity for free drawing giveaways such as “show your ASB and get an item free.”

ASB funds support the student newspaper, athletic programs, Fine Arts Division events, and completely fund the Associated Student Organization (ASO).

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 or Winter session is $20 for automobiles or motorcycles.

Visitors must also pay a parking fee by purchasing a daily parking permit.

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 ECC Compton Center 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 Campus Police/Parking Services.

Red and white 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, through the Records Office. 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.

E-Mail Accounts and the Portal

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

john_doe@elcamino.edu

Students are also encouraged to 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 an appointment to register 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. It is 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, 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 summer or winter sessions, the college publishes a Schedule of Classes listing the courses offered, general registration procedures and placement and college ability tests. Schedules are available on the Web and may also be obtained at the Help Desk in the Student Services Center.

Priority Registration

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

I. Special registration assistance to the handicapped or disadvantaged students as defined by statute for the purpose of providing equalization of education.

II. Students will receive priority registration according to this ranking system and criteria:

A. General registration priority will be awarded as follows:
   1. First priority: continuing students
   2. Second priority: new and re-admit students
B. For fall and spring semesters, the enrollment of continuing students in accordance with priority system established on the basis of these factors:

1. One point for each unit completed at El Camino College plus one point for each unit in which he/she is currently enrolled (mid-term), with a maximum of 60 points.
2. Points awarded according to the total units in current program after the 12th week, as follows: 0 to 3 units equals 0 points; 3.5 to 6 units equals 2 points; 6.5 to 9 units equals 4 points; 9.5 points to 15 units equals 6 points; and 15.5 plus units equals 10 points.
3. A reward of 15 points to students for maintaining their original unit load from the start of the semester through the 12th week.
4. A reward of 10 points to students with 2.0 or higher cumulative GPA.
5. Day and evening programs are used to divide the student body into a day or extended day priority system. One or more day classes constitutes a day program.

III. The early enrollment of students who meet one of these guidelines:

A. Instruction program requires time off campus limiting the choice of class periods on campus.
B. The instructional activity requires a block of time associated with scheduled classes for such activities as practice, meetings, counseling and off-campus travel.
C. First semester F-1 visa student.

Continuous Enrollment for Priority Registration

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

Fees at a Glance

<table>
<thead>
<tr>
<th>Fee Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrollment Fee</td>
<td>$26 per unit (subject to change)</td>
</tr>
<tr>
<td>Parking Fee - Car</td>
<td>$35 for each semester</td>
</tr>
<tr>
<td>Parking Fee - Motorcycle</td>
<td>$20 for each semester</td>
</tr>
<tr>
<td>Parking BOGW - Method A or B</td>
<td>$20 for each semester</td>
</tr>
<tr>
<td>Parking BOGW - Method C (FAFSA only)</td>
<td>$20 for each semester</td>
</tr>
<tr>
<td>Health Fee</td>
<td>$17 for each semester (subject to change)</td>
</tr>
<tr>
<td>Out-of-state Fee</td>
<td>$183 per unit plus the enrollment fee</td>
</tr>
<tr>
<td>Out-of-country Fee</td>
<td>$213 per unit plus the enrollment fee</td>
</tr>
<tr>
<td>F-1 Visa Student Health Insurance</td>
<td>$396 per semester (subject to change)</td>
</tr>
<tr>
<td>Auditing</td>
<td>$15 per unit</td>
</tr>
<tr>
<td>Credit by Examination</td>
<td>$26 per unit</td>
</tr>
<tr>
<td>Transcripts</td>
<td>First two free; $5 for each thereafter; $8 for emergency</td>
</tr>
<tr>
<td>College Catalog</td>
<td>$5 in Bookstore, $7 by U.S. Mail</td>
</tr>
<tr>
<td>ASB Activity/Discount Sticker</td>
<td>$10 per semester</td>
</tr>
<tr>
<td>Student Representation Fee</td>
<td>.50¢ per semester (required)</td>
</tr>
</tbody>
</table>
Unit Limitations

The student’s program of studies will vary according to individual need and objectives. There is no minimum but the maximum 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 six-week summer session is 8 units or 9 units for the eight-week session 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 per week in 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 7 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 4 units during the summer session.

Veteran and War Orphan benefits under the G.I. Bill are based on 12 units for full subsistence; 9 units for three-fourth subsistence; 6 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 8 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-state and subject to deportation.

Filled and Cancelled Classes

Because many classes fill quickly in the registration process, students should enroll for classes as soon as the 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, then they 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 which is scheduled, occasionally a class must be canceled due to insufficient enrollment or to the unavailability of an instructor.

Attendance by Non-registered Students

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

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 the California Code of Regulations, Subchapter 3, Section 55220, if a student participates in a voluntary field trip or excursion, the student has deemed to have held 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.

Matriculation

Matriculation is an on-going process which helps students attain success and achieve educational goals. The matriculation process is designed to help match interests, abilities, needs, and goals with the college’s courses, programs, and services.

Matriculation services are intended to help students make informed decisions as they develop an educational plan. El Camino College supports educational development and recognizes each student’s worth as an individual through matriculation and related services.

Students are expected to participate in the matriculation process. Participation provides information about and referrals to programs and services that will contribute to academic success.

Four Steps to Matriculation

Step 1. File a college application and declare one of these goals:
- Transfer to a university without an associate degree
- Associate degree and transfer to a university
- Associate degree in a vocational program
- Associate degree in a general education program
- Certificate in a vocational program

Step 2. Participate in assessment for educational planning.

Assessment is based on multiple measures, including placement tests. Take appropriate placement tests and consult with an academic counselor. New students who have not attended college before, should schedule an appointment for a My New Student Orientation workshop to determine educational needs, career interests, aptitudes, and other pertinent information needed to complete an initial assessment. Placement testing is available in the Assessment/Testing Center, SSVC 217. English or ESL or Mathematics assessment should be completed before attempting to register in classes. Please read the “Assessment Procedures” for more information about specific placement or specialized tests.

Students must have transcripts or grade slips from all colleges attended before you make a counseling appointment. English, Mathematics, ESL, 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 for assessment. Official transcripts must be mailed from high school, college, or university to the Records Office.

Step 3: Participate in the My New Student Orientation workshop and counseling for El Camino College.

New students must attend an educational planning orientation session or complete the online orientation (www.elcamino.edu/MyECC) in order to complete the matriculation process. The My 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 your academic goals.

Step 4: Follow-up and educational planning with a counselor.

Follow-up and meet with your counselor at least once a year as part of the matriculation process. During this meeting, students will complete a written educational plan which is a list of recommended courses to take to reach your educational goal. Any concerns regarding the matriculation process may be addressed with the Dean of Counseling and Student Services. 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 matriculation process.

Orientation

All students are encouraged to participate in orientation so as to become familiar with the college and its resources. Orientation is offered in different locations: online (www.elcamino.edu/MyECC) and matriculation counseling groups for new students. Special orientation sessions are arranged for high school students through their high schools. Orientations are also arranged for students who participate in the following support programs, such as Honors, EOP&S, Financial Aid, students with a disability, athletes, and international students. Our El Camino College New Student Welcome Day, scheduled every year on the third Wednesday in August, is a great way for students to get to know the campus, learn about academic programs, services and meet new friends.

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 have an El Camino College application on file. This can be done online or in person in the Admissions Office. Next, complete your placement tests at the Assessment/Testing Center located in Room 217 of the Student Services Center. A photo I.D., such as a driver’s license, and your El Camino College I.D. 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 you register for courses. Re-testing is limited and may not be done after you have enrolled in any course related to the test.

English Placement Test

The computerized English Placement Test should be completed before you register and may not be repeated once you have enrolled into both English course sequences at El Camino College. You should complete this test for any course which 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. 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 process, you will first need to file your El Camino College application in Admissions or online. For testing, you will need a photo I.D. and your El Camino College I.D. number.

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 computerized ESL Placement Test should be completed before you register. Students must complete this test for any course which 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 process, you will first need to file your El Camino College application in Admissions or online. For testing, you will need a photo I.D. and your El Camino College I.D. number.

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 you register.

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

Mathematics Placement Test

The computerized Mathematics Placement Test should be completed before you register in any mathematics course and may not be repeated once you have enrolled in 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 SAT mathematics scores may not take the place of the Mathematics Placement Test, but may be used as part of your overall assessment. Assessment/placement results are valid for two years.

In order to begin the process, you will first need to file your El Camino College application in Admissions or online. For testing, you will need a photo I.D. and your El Camino College I.D. number.

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 you register 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 in themselves 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 El Camino College application in Admissions or online. For testing, you will need a photo I.D. and your El Camino College I.D. number.

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. 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 test, you will first need to file your El Camino College application in Admissions or online. For testing, you will need a photo I.D. and your El Camino College I.D. number.

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

DRP (Degrees of Reading Power) Test
The DRP Test is a reading test administered by the Assessment/Testing Center for the El Camino College Nursing Department. The test is a course required for Nursing 145 and is given on an appointment-basis only. A reservation ticket must be obtained in person from the Assessment/Testing Center.

ATB (Ability-To-Benefit) Test
In order to receive financial aid, students must be “academically qualified” for study at the post-secondary level. Students who possess a high school diploma or a GED certificate are considered to have met this qualification. However, students who did not graduate from high school or who do not have a GED must pass an Ability-To-Benefit Test prior to receiving financial aid.

The ATB Test is given only upon the written referral of the Financial Aid Office. Their referral slip must be presented to the Assessment/Testing Center in order to test.

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

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 will be 15.

Students who plan to transfer are advised that the specific transfer institution will determine unit and course credit for AP exams. 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 institutions 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.

Art Examination (History of Art):
Art 2 (3 units);
Art 3 (3 units)

Biology Examination:
Biology 10 (4 units)

Chemistry Examination:
Chemistry 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:
Computer Science 1 (4 units) - Score 4 or 5 on Computer Science A Examination, or 3 or 4 on AB Examination
Computer Science 1 and 2 (9 units) - Score of 5 on Computer Science AB Examination

Economics Examination (Macroeconomics):
Economics 1 (3 units)

Economics Examination (Microeconomics):
Economics 2 (3 units)

English Examination (Language and Composition):
English 1A (4 units) - Score of 3 or 4
English 1A and English 1B (7 units) - Score of 5

English Examination (Literature and Composition):
English 1A (4 units) or
English 1B (3 units) - Score of 3 or 4
English 1A and English 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):
Political Science 1 (3 units)

Government and Politics Examination (Comparative):
Political Science 2 (3 units)

History Examination (American and European):
History 101-102 (6 units)
History 140 (3 units)

Mathematics Examination:
Mathematics 150 (4 units) - Score of 4 or 5 on Statistics Examination
Mathematics 190 (5 units) - Score of 4 or 5 on Calculus AB Examination
Mathematics 190 (5 units) - Score of 3 on Calculus BC Examination
Mathematics 190 & 191 (9 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 associate degree, IGETC (Area 2) and CSU General Education (Area B4) mathematics requirements.)

Physics Examination:
Physics 2A (4 units) - Score of 5 on Physics B Examination
Physics 1A (4 units) - Score of 5 on Physics C Examination

Psychology Examination:
Psychology 5 (3 units)

For further information about and petitions for advanced placement tests, contact an evaluations clerk in the Admissions Office.
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 students who were unable to enroll at the time of registration. 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 may result in a "W" and may subject the student for any and all fees associated with the class.

Attendance Without Official Enrollment
Students will not be permitted to attend classes in which they are not enrolled. Exceptions may be allowed by the instructor for bonafide 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.

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% 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 still be retained on the course roster and receive a failing grade. Students may view their registration status using the college’s website.

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.

Withdrawal from Class
Official withdrawal from class must be processed through the online system in the Admissions Office. 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.

Independent Study Policy and Procedures
Board Policy 4228
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 projects must be approved by the supervising instructor and will require the student to meet regularly with the instructor. Academic standards applicable to Independent Study courses will be the same as those applied to other credit courses.

1. To be eligible for Independent Study, a student must be in good academic standing and
2. Have completed at least 12 degree-applicable units at El Camino College with a GPA of 3.0 or higher, and
3. Have demonstrated competence in the discipline in which the Independent Study course is being attempted by completing at least two courses in this discipline with a grade of B or higher, and
4. Be concurrently enrolled in at least one other course at El Camino College.

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

Independent Study Administrative Procedures 4228
1. The supervising instructor will scrutinize proposed projects for appropriate depth and rigor. Such projects might, for example, include a lengthy research study, an original production, or a comprehensive exam. The supervising instructor will provide appropriate orientation, guidance, and information regarding course content materials and services and will document progress toward project completion. Projects will be evaluated by the supervising instructor, and the basis for evaluation will be kept on file for at least one semester.
2. Independent Study projects will normally be for one unit of credit, with a maximum of three units per semester; one unit of credit will be granted for 60 hours of work devoted toward the project. A student may earn a maximum of six units of Independent Study at El Camino College.
3. To promote an individualized educational experience for each student, an instructor will supervise a limited number of Independent Study students in one semester or session, as determined by the terms of the Agreement between the District and the ECC Federation of Teachers in effect at that time. In accordance with the Agreement, the Dean of the division in which the Independent Study will be offered shall approve or disapprove each course to be offered.
4. Academic standards applicable to Independent Study courses will be the same as those applied to other credit courses. Independent Study courses will be accepted by the college toward completion of an associate degree and shall be eligible for transfer credit by an institution of the University of California or California State University.

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.
Credit by Examination
Administrative Procedures 2008

Eligibility Requirements

1. Students must be registered and have completed 12 semester units at El Camino College with a minimum grade point average of 2.00 and in good standing at the time the credit is granted. Students enrolling in or enrolled at El Camino College may be allowed to take the examination prior to completing 12 units; however, credit will not be granted until 12 semester units have been completed.

2. Students shall be allowed to petition to receive credit by examination one time per course. Records staff will check a student's permanent electronic record to ensure that the test has not been taken previously.

3. Students may not petition for credit by examination for a course in which they have previously enrolled and received a grade.

4. Students may not petition for credit by examination for a course in which they have been enrolled after the first two weeks of a semester, unless the dean and the appropriate faculty determine otherwise. Students should check with the appropriate division office for its actual policies.

5. Students must petition for credit by examination no later than the middle of the term unless the dean and the appropriate faculty determine otherwise. Students should check with the appropriate division office for its actual policies.

6. Only those courses listed in the catalog may be available to students for credit by examination. In addition, the course must be on the division's approved list of courses available for credit by examination.

7. Credit is not available for any course that is lower in a sequence than a course for which credit has already been granted, unless the dean and the appropriate faculty determine otherwise. Students should check with the appropriate division office for its actual policies.

8. The amount of credit permissible shall not exceed 15 semester units and not be more than 50% of the credit required for the major subject field.

Fees

Resident students will pay the same amount per unit as the current enrollment fee. Non-resident students will pay this same amount and the current appropriate non-resident tuition fee. These fees are non-refundable and payable at the Records Office. Students involved in the high school/ROC articulated programs would be exempted from paying this fee.

Procedures

1. Students requesting Credit by Examination will be referred to the College Records Office.

2. The Records Office will check the eligibility requirements.

3. Resident students will pay the same amount per unit as the current enrollment fee. Non-resident students will pay this same amount and the current appropriate non-resident tuition fee. These fees are non-refundable and payable at the Records Office. Students involved in the high school/ROC articulated programs would be exempted from paying this fee.

4. Students will take a completed petition form with the supporting documentation to the appropriate academic division. The academic division dean or designee, in consort with appropriate faculty, shall assess the qualifications of the student and approve or deny the petition. If approved, the academic division dean and faculty will agree upon compensation in accordance with the section of the Agreement on Overload Pay (Article X, Section 7(c) in the 2000-2003 Agreement).

5. If the petition is approved, the appropriate faculty will determine the form and content of the examination. Subject matter mastery and/or skills proficiency, as stated in the objectives of the course outlines of record, will be established by written examination, portfolio, skills demonstration or combination thereof. The dean or designee will notify the student to contact the appropriate faculty member for the examination arrangements.

6. The examination shall be graded and recorded only as credit/no credit and the results shall be recorded on the petition form sent to the division office and then forward to the Records Office. Examinations will be kept on file in compliance with the current policy for retention of exams.

7. The Records Office shall record credit/no credit in the student's permanent electronic file. When all eligibility requirements have been met, the Records Office shall record credit/no credit for the course on the student's official transcript. The petition, with recorded results, shall be filed in the student's folder. The Records Office shall notify the student of the results.

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 Administration, or similar agencies and shall not be considered in verifying eligibility for athletics or student government.

Courses Eligible for Credit by Examination

Behavioral and Social Sciences Division

None

Business Division

Computer Information Systems 13

Fine Arts Division

Dance 1
Theatre 1, 4

Health Sciences and Athletics Division

Contemporary Health 1, 3
First Aid 1
Nursing 48ab, 150, 151, 152, 153, 154, 155, 156, 250, 251, 252, 253, 254, 255,
Physical Education 260
Radiologic Technology A, 111, 113
Respiratory Care 170, 172, 174, 176, 178, 280, 282, 284, 286

Humanities Division

Chinese 1, 2
English 1A
French 1, 2, 3, 4
German 1, 2, 3
Italian 1, 2
Japanese 1, 2, 3, 4
Spanish 1, 2, 3, 4

Industry and Technology Division

Administration of Justice 15, 70, 100, 103, 107, 109, 111, 115, 126, 130, 131, 133, 134, 135, 136, 140, 170
Air Conditioning and Refrigeration 5, 6, 21, 22, 23, 25, 27, 32, 33, 34
Architecture 100, 104, 120abcd, 121abcd, 125abcd, 150A, 150B, 158, 170, 172, 199ab
Automotive Collision Repair/Painting 1A, 1B, 1C, 1D, 2A, 2B, 2C, 3A, 4abcd, 5abcd, 6abcd, 20, 22, 24, 26
Automotive Technology 1, 11, 14, 16, 21, 22A, 23, 24, 25, 31, 34, 43, 45, 47, 81
Computer Aided Design/Drafting 5, 10abcd, 28abcd, 31abcd, 32abcd, 33abcd, 37abcd, 45, 47, 49
Construction Technology 107abcd, 172, 180
Electronics and Computer Hardware Technology 11, 110, 120, 122, 124, 130, 191, 192
Engineering Technology 10, 12, 14, 16, 18
Fashion 4ab, 10ab, 11ab, 14, 15ab, 16ab, 20, 24abc, 26A, 26B, 27, 28, 29ab, 31, 35, 41
Fire and Emergency Technology 1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 14,
Concurrent Enrollment of K-12 Students

Board Policy 5060

It is the policy of 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 shall develop 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.

F-1 Visa Procedure

International Students

El Camino College is approved by the 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 office. Students attending another school in the United States on an F-1 visa may request a transfer to El Camino College by contacting our International Student Program office. International Students are encouraged to visit the International Student Program website 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 enrolling in classes. These orientations are scheduled just before the beginning of the fall and spring semesters. Therefore, new students should plan to begin their first semester at El Camino College in either the fall or spring. International students who fail to attend this orientation are subject to the loss of privileges.

International Student Application Procedures

Application deadlines are generally the first of July for the fall semester and the first of December for the spring semester. A packet of information giving time lines and procedures for applying to El Camino College is sent when a prospective student applies for admission from their homeland by requesting an application packet from the International Student Program office. Students attending another school in the United States on an F-1 visa may request a transfer to El Camino College by contacting our International Student Program office. International Students are encouraged to visit the International Student Program website at www.elcamino.edu/academics/is to download the application.

Before prospective international students can be considered for admission, they must: complete the application form including a recent photo; provide an affidavit of financial support; enclose the processing fee; provide transcripts of college and secondary grades translated into English and bearing the school seal and signed by
the registrar or other appropriate official; provide official TOEFL results [133 - computer-based test; 450 - paper-based test; 45 - internet based test] or proficiency level from an accredited language school. Information regarding the TOEFL can be found at www.ets.org.

Information about the TOEFL and registration forms may be obtained at American embassies and consulates, offices of the U.S. Information Service [USIS], U.S. educational commissions and foundations, and U.S.-sponsored learning institutions. The El Camino College code for the TOEFL is 4302.

For students who were not able to achieve a satisfactory TOEFL score or who want to improve English language skills, El Camino College offers an intensive English program, the El Camino Language Academy [ECLA]. The program is 14 weeks in the fall and spring semesters and eight weeks in the summer. Applications for the academy are available at the International Student Program office or through the academy directly at www.uslanguageacademy.com.

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 deadline may be denied admissions 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 official TOEFL scores, which are not more than two years old, sent to the International Student Program office. A minimum TOEFL score of 133 CBT (computer-based test) or 450 PBT (paper-based test) or 45 IBT (internet based test) 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 ISP desk.

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 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.

Transcripts

Students applying for admission from outside the United States should send translated copies of all high school and college work they have completed. These transcripts should bear the original school seal and be signed by the registrar or an appropriate official of each college or secondary school attended.

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 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. Transcripts must be translated into English and must bear the school seal and be signed by the registrar or appropriate school official.

Housing

Although there are no dormitories available at El Camino College, assistance with locating housing is available through the International Student Program Office. Information regarding housing is part of the information packet sent to students when they are accepted to the college.

Estimating Expenses

Attending El Camino College for the first two years of instruction is an economical way to obtain a college education in the United States.

Tuition, fees, and mandatory medical insurance at El Camino College for the 2010-2011 school year are approximately $3,000 for each 16-week semester or $6,000 for the academic year.

Textbooks and supplies may range from $400 to $600 for each semester. Room and board expenses vary depending upon the type of housing chosen, but may be estimated for the 10-month school year at $10,000.

An estimate of total expenses for the 10-month school year, including tuition and fees, textbooks and supplies, room and board and insurance, is $17,000. This does not include personal spending money.

Policies and Procedures

Grading and Academic Record Symbols

Board Policy 4230

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.

Grades, Grade Points, and Grade Point Average

Grade points are numerical values which indicate the scholarship level of letter grades. 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 following scale:

<table>
<thead>
<tr>
<th>Letter Grade</th>
<th>Points per Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td>3</td>
</tr>
<tr>
<td>C</td>
<td>2</td>
</tr>
<tr>
<td>D</td>
<td>1</td>
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<tr>
<td>F</td>
<td>0</td>
</tr>
<tr>
<td>NP</td>
<td>[less than satisfactory, or failing - units not counted in grade point average - See Note 1]</td>
</tr>
<tr>
<td>I</td>
<td>See Note 2</td>
</tr>
<tr>
<td>IP</td>
<td>See Note 3</td>
</tr>
<tr>
<td>W</td>
<td>See Note 4</td>
</tr>
<tr>
<td>MW</td>
<td>See Note 5</td>
</tr>
</tbody>
</table>

Notes:

1. For students who were not able to achieve a satisfactory TOEFL score or who want to improve English language skills, El Camino College offers an intensive English program, the El Camino Language Academy [ECLA]. The program is 14 weeks in the fall and spring semesters and eight weeks in the summer. Applications for the academy are available at the International Student Program office or through the academy directly at www.uslanguageacademy.com.

2. 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 deadline may be denied admissions to El Camino College.

3. Students who have scored above 600 on the TOEFL, or whose native language is English, will take the regular English Placement Test.

4. Transcripts 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.

5. No further consideration will be granted. F-1 visa students who miss the published deadline may be denied admissions to El Camino College.

6. Tuition, fees, and mandatory medical insurance at El Camino College for the 2010-2011 school year are approximately $3,000 for each 16-week semester or $6,000 for the academic year.

7. Textbooks and supplies may range from $400 to $600 for each semester. Room and board expenses vary depending upon the type of housing chosen, but may be estimated for the 10-month school year at $10,000.

8. An estimate of total expenses for the 10-month school year, including tuition and fees, textbooks and supplies, room and board and insurance, is $17,000. This does not include personal spending money.
1. 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% 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. The written record containing the conditions for removal of the "I" will be held for the student in the Records Office through the sixth week of the next regular semester. 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. The student should petition for the extension of time on a form provided by the Admissions Office.

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 reenroll 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% 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 fourth week of a 16-week class, or 30% 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.

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, 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% 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% 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 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% for three consecutive semesters. 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 in compliance with administrative procedures.

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," and "NC/NP" entries is below 50%.
Probation, Disqualification and Dismissal
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 is limited to no more than 12 units in any semester of 16 weeks or more, and no more than 4 units in any session shorter than 16 weeks [i.e. winter or summer session].
3. A student who is on Academic or Progress Probation or who is returning to El Camino College after having been dismissed is advised to see a counselor before registering for subsequent semesters.
4. The student has the right to appeal dismissal.
   a. The student must file the written petition of appeal with the Admissions 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.
   b. 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.
   c. Petitions will be reviewed by the Reinstatement Committee. The student will be notified of the Committee's action in a timely manner.
   d. The student may appeal the Committee's decision in writing to the Dean of Counseling within 21 days of the date of notification. The decision of the Dean of Counseling 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 El Camino College voluntarily while on probation will be readmitted in the same status that existed at the time of withdrawal.

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 given.

Procedures for appeal have been developed by the President/Superintendent or his designees in collegial consultation with the Academic Senate.

This policy supersedes the section of BP 4230 (Grading and Academic Record Symbols) dealing with Course Repetition.

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

Course Repetition Administrative Procedure 4225

Repetition of a Course for Which a Grade of D, F, NC, or No Pass was Earned:

Students who have received a substandard grade [that is, D, F, or NC or No Pass] will be allowed to repeat that course a maximum of two times. Students will not be permitted to enroll for a third time except under extenuating circumstances or for "lapse of time" and upon written permission of the division dean and/or the director or assistant director of Admissions and Records. Extenuating circumstances are verified cases of accidents, illnesses, or other circumstances beyond the control of the student.

Upon completion of the repeated course, the previous grade and credit will be disregarded and the new grade and credit will be substituted in computing the grade point average (GPA). Note: Although the previous grade is disregarded in the computation of the GPA, it must remain permanently on the academic transcript.

Students who have received a substandard grade who then successfully complete an equivalent course at another accredited institution may petition the Records Office to have the previous grade and credit disregarded in computing their GPA and to have their academic record annotated.

If the course is one with lowercase letters such as Chinese 11ab or Journalism 11abcd and students repeat a course to alleviate a substandard grade, they can petition the Records Office to have the previous grade and credit disregarded in computing their GPA and to have their academic record annotated.

Nothing in the policy and procedure on Course Repetition can conflict with Education Code §76224 pertaining to the finality of grades assigned by instructors or with Title 5 or district procedures relating to the retention and destruction of records.

Repetition of a Course for Which a Grade of A, B, C, CR, or Pass was Earned:

Students who have received a grade of A, B, C, CR or Pass in a course may repeat the course only under the circumstances listed below:

1. A student may repeat a course if, upon written petition to the dean of the relevant division, the district determines that the student's previous grade is, at least in part, the result of extenuating circumstances. Extenuating circumstances are verified cases of accidents, illnesses, or other circumstances beyond the control of the student. The new grade and credit will not be counted toward the student's total units or GPA.

2. A student may repeat a course if, upon written petition to the dean of the relevant division, the district determines that repetition is appropriate to the student's goals because of a significant lapse of time. The new grade and credit will not be counted toward the student's total units or GPA.

3. A student may repeat any number of times courses which are necessary to meet a legally mandated training requirement as a condition of continued paid or volunteer employment. The district maintains a list of courses to which this procedure applies. The resulting grades and credits will be counted towards the student's GPA.

4. A student may repeat courses with lowercase letters (for example, Chinese 21ab or Journalism 11abcd) up to the number of letters (that is, Chinese 21ab may be taken a total of two times and Journalism 11abcd a total of four times). No special permission is required, and all credits and grades earned will be included in the student's GPA.
Withdrawal and Re-enrollment:
A grade of W may count as a repetition for the purposes of this policy. However, college policy allows a student to re-enroll in a specific course in which the student has received a W only two more times, for a total of three attempts. Any exception to this policy requires the student to file a petition for excessive repeats.

Courses Designed for Students with Disabilities:
The limitations detailed in this procedure do not apply to special courses designed for students with disabilities. Such courses are defined as being taught by an instructor with minimum qualifications established by Title 5, § 53414, such as a master’s degree in rehabilitation counseling. However, when such students take regular classes, they are subject to the same repetition limitations as other students.

Additionally, procedures have been developed to ensure that students are not permitted to enroll in courses for which they are not eligible and to ensure that the college’s apportionment claims are in compliance with the California Code of Regulations and Title 5 § 58161 in this regard.

Limitation to Remedial Coursework
Board Policy 4222
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.

Academic Renewal Policy and Procedures
Board Policy 4240
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. A student may petition to have up to 24 semester units of substandard work [D, F or WF grade assigned] taken at El Camino College disregarded in determining the student’s grade point average.

Procedures for implementing the policy will be developed with collegial consultation with the Academic Senate, as defined in CCR Title 5, Section 53200.

This policy supersedes the section of BP 4230 dealing with Academic Renewal.

Academic Renewal Academic Procedure 4240
A student may petition to have up to 24 semester units of substandard work [D, F or WF grade assigned] taken at El Camino College disregarded in the determination of the grade point average (GPA), subject to limitations as follows:
1. The student must have earned a GPA of 2.25 or higher in the last 30 units of graded work, or 2.5 or higher in the last 24 units of graded work, completed at any regionally-accredited college or university.
2. At least two years must have passed since the end of a semester with a grade to be disregarded.
3. A student may be granted academic renewal at El Camino College only once.
4. Units disregarded by other institutions shall be deducted from the 24 semester units maximum of course work to be disregarded by El Camino College.
5. Course work with disregarded grades may not be used to meet degree or certificate requirements.

Academic renewal actions are irreversible.

Students requesting Academic Renewal may obtain an Academic Renewal Petition in the Records Office.

The student’s permanent academic record shall be annotated to indicate all disregarded course work, but all grades shall remain legible to ensure a true and complete academic history.

If another accredited college has removed previous course work from associate in arts or bachelor’s degrees consideration according to the terms of that institution’s policy, such an action shall be honored by El Camino College.

It is the student’s responsibility to ensure that any institution or program to which he or she is applying will accept Academic Renewal from El Camino College.

These procedures supersede the provisions of BP 4230 dealing with Academic Renewal.

El Camino College Student Rights and Responsibilities
Student rights and responsibilities are outlined in Board Policy 5506. This policy, which is accessible at offices throughout the college, states that students have rights and responsibilities as provided for in law, including the State Education Code and the Title 5 Matriculation regulations; Board policies, including the Academic Honesty and Standards of Conduct; and health and safety considerations.

Discrimination/Sexual Harassment Complaints
El Camino College is committed to providing equal opportunity in education and employment. The college affirms its policy to provide fair and equitable treatment of students and employees and to prohibit discrimination on the basis of ethnic group identification, national origin, religion, age, sex [harassment], race, color, ancestry, sexual orientation, physical or mental disability, or retaliation.

Students or employees with questions, concerns or complaints of discrimination may contact and/or file an official complaint with the offices or agencies listed below to initiate an El Camino College discrimination investigation.

It is the policy (Board Policy 1600) of the El Camino Community College District to encourage full inclusion of people with disabilities in all programs and services. Accommodations and alternative formats are available upon request by calling 310-660-3296.

In compliance with Board Policy 1600, a screen-reader friendly copy of this document may be found at www.elcamino.edu and/or a copy of this document in alternative formats is available upon request by calling 310-660-3406.

Quejas de discriminación o acoso sexual
El Camino College está comprometido a brindar igualdad de oportunidades de empleo y educación. Esta institución reitera su política de proveer un trato justo y equitativo a los estudiantes y empleados, y prohibir la discriminación basada un raza, color, descendencia, religión, sexo [incluyendo acoso sexual], origen nacional [incluyendo limitaciones de idioma] edad, incapacidad [mental o física] incluyendo VIH y SIDA, condición médica (cáncer o características genéticas) estado civil, orientación sexual, estado de veterano, y negación de licencia o acomodación razonable por maternidad.

Los estudiantes y empleados con preguntas, dudas o quejas de discriminación pueden comunicarse y/o presentar una queja oficialmente en las oficinas o agencias que se nombran a continuación, para iniciar una investigación de discriminación por parte de El Camino College.

La política de la Mesa Directiva del Distrito de El Camino Col-
Sexual Harassment Policy

It is the policy of the El Camino Community College District to provide an educational, employment, and business environment free of unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct or communications constituting sexual harassment as defined and otherwise prohibited by state and federal statutes. Within the El Camino Community College District, sexual harassment is prohibited regardless of the status and/or relationships the affected parties may have.

Sexual harassment violates the policy of the District and provisions of the California Fair Employment Act, Education Code and federal rules, regulations and laws, prohibiting sexual harassment.

Sexual harassment complaint forms are available in the Office of the Director of Staff and Student Diversity.

Sexual harassment shall be immediately reported to the District’s Title IX Coordinator, Director of Staff and Student Diversity, or to any dean, director, or manager for immediate reporting to the District’s Director of Staff and Student Diversity or designee.

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

- El Camino College Equal Employment Officer-
  Administration Building, Room 210,
  310-660-3593 x3813 (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,
  Old Federal Building 50 United Nations Plaza,
  Room 239, San Francisco, CA 94102 (Students)
- California Department of Fair Employment and Housing,
  611 W. Sixth Street, Suite 1600, Los Angeles,
  CA 90017-3116 (Students/Employees)
- U.S. Equal Employment Opportunity Commission,
  255 E. Temple Street, 4th Floor, Los Angeles, CA 90012
  (Students/Employees)
Student Services

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 7:30 a.m. to 7:00 p.m. Monday through Thursday and 7:30 a.m. to 4:00 p.m. on Friday.

Textbooks can be returned for a full refund during the first week of the fall and spring semesters. Textbooks purchased for winter and 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 your books is during the last week of a semester or session. Textbooks may be purchased online at www.elcamino.edu. Proceeds from the Bookstore are used to support the Auxiliary Services Fund and site improvement projects on campus.

Cashier’s Office

The Cashier’s Office is located on the main floor of the Administration Building and is open from 9:00 a.m. to 6:00 p.m. Monday through Thursday and from 9:00 a.m. to 12:00 p.m. on Friday. Students may pay fees, make class changes, obtain class printouts, purchase parking permits and the Associated Student Body activity sticker. Students may purchase discounted theater and amusement park tickets at the Ticket Office, located at the Marsee Auditorium.

Counseling Services

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

As an integral part of the matriculation program, counseling services are particularly intended to assist students in clarifying career and life goals and in developing an appropriate course of study based on a student’s goals, aptitudes and interests.

Express Counseling is usually available Monday, Tuesday, Thursday from 9:00 a.m. to 6:00 p.m. and Wednesdays from 9:00 a.m. to 7:00 p.m. for students who have questions which do not require transcript review. The Express Counseling schedule is subject to change based on counselor availability. Please call 310-660-3458 for the Express Counseling daily schedule.

Career Center Services

Career Center services are offered Monday through Thursday from 9:00 a.m. to 6:00 p.m. The Career Center is located in the Counseling Division on the first floor of the Student Services Center. Opportunities for extensive exploration and evaluation of interests, aptitudes, skills, and other characteristics related to vocational and pre-professional planning and job success are available.

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, Internet career resources, career pamphlets, video cassettes, occupational files, and a computerized career information system, describing thousands of jobs and providing information on local, state, and national job markets.

Career and job search booklets are also available in the Career Center. For more information, please call 310-660-3593, extension 6137.

CalWORKs/TANF Services

The CalWORKs Program offers a wide array of services to parents who are receiving Temporary Assistance for Needy Families (TANF) and those in transition from welfare to long-term self-sufficiency. Services include a) Interim Child Care Assistance for students not yet eligible and/or other temporary issues which prevent them from being eligible for county, b) On-Site GAIN Social Workers from Regions I and V that assist with county related matters, c) Career Counseling to assist students with choosing a career that fits personal interests and abilities, d) Academic Advisement and Assistance where educational plans are developed for students on an individual basis, and e) Work Activity and Job Placement Assistance which assists students with their required 32 hour per week compliance.

The office is located in the Student Services Center building, Room SS205B. Office hours are Monday, Tuesday and Thursday 9:00 a.m. to 5:30 p.m., Wednesday 9:00 a.m. to 6:30 p.m. and Friday – closed. Students can be seen by appointment or during drop-in hours. For more information, please contact the CalWORKs office at 310-660-6057.

Child Development Center

The El Camino College Child Development Center is located across Redondo Beach Boulevard from campus in a fully-equipped million dollar facility with licensed and credentialed teachers and staff. The Center is accredited by the National Association for the Education of Young Children.

The Center offers two programs. Both are open to the public as well as to students, staff, faculty, and their families. The Child Development Center provides these services:

- A fee-based day program for children ages 2 years old (toilet trained) through 5 years old. Hours for these services are 6:45 a.m. to 5:30 p.m. Monday through Friday.
- State Funded Pre-School: A free program for children ages 3-4 by December 2. Enrollment is based on family income. The program operates two sessions, Monday through Friday, 8:00 a.m. to 11:59 a.m. or 12:30 p.m. to 4:29 p.m. A child may only be enrolled in one of these sessions.
- The Center for eligibility information.

Application packets are available in the Child Development Center. For information, call 310-660-3720. A grant program is available for qualifying student parents.

2010-2011 El Camino College Catalog
Extended Opportunity Programs and Services (EOP&S)

The EOP&S/CARE programs provide students with support services in the areas of counseling, transfer, tutorial, and financial aid. A supplemental CARE program is offered to single parents receiving CalWORKs benefits. Eligible students must meet the BOGW income level and have an educational need. The program offers priority registration, counseling, progress monitoring, transfer fee waivers, grants, emergency loans, and book vouchers. In addition, CARE students are eligible for meal tickets, child care assistance, and auto repairs.

EOP&S peer advisors assist students with understanding college life as it relates to their personal, financial, and academic issues. Tutorial services offer a computer lab for eligible students and tutor assistance on a variety of academic subject areas.

EOP&S/CARE is located in the Student Services Center, Rooms 202, 203, and 204. For information, call 310-660-3466.

Student Job Placement Center (SJPC)

The Student Job Placement Center is located in the Student Services Center, Room 204, and is open from 9:00 a.m. to 5:00 p.m., Monday through Thursday and closed on Friday. The website address is www.elcamino.edu/studentservices/sjpc. SJPC provides current students and alumni who have completed a minimum of 15 units at El Camino College opportunities to find part-time and full-time jobs, as well as seasonal, summer and temporary employment, including internships. A comprehensive job board and a computer lab allow students to search for jobs in the local area. The computer lab may also be used to explore online job search engines, fill out online employment applications, and write a resume and/or cover letter.

SJPC also assists students in writing resumes and cover letters as well as preparing for interviews. Resume workshops and mock interview appointments can be made with the advisor. For information, call 310-660-3453. SJPC will also fax resumes to employers, if needed. In addition, students may use a phone for employer contact, if needed. Several job and internship fairs are held each semester. Individual employers also come to the campus to recruit on a regular basis.

Learning Resources Center (LRC)

The LRC offers academic support services and resources – tutorial, instructional software and media materials, individualized instruction in basic reading and math, 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 service hours. For additional information, visit http://www.elcamino.edu/Library/lrc or call 310-660-3511.

The Learning Resources Center is dedicated to helping students, faculty, and staff of El Camino College achieve their academic goals. The LRC offers programs to enhance teaching and learning through the use of audio-visual materials, computer assisted instruction, and tutorial services which are located in the following areas:

- The LMTC Computer Commons (Library – East Wing, basement) is El Camino College’s central computer facility that provides all students and disciplines with a general use drop-in computer lab. The Computer Commons uses fully networked Windows-based computers where students have access to a variety of resources including color and laser printing, scanning, adaptive access tools and Internet access on over 160 computers. Software includes word processing, database, spreadsheet, presentation, and graphics programs. Specialized applications support academic programs including business, computer science, fine arts, health sciences, nursing, English, ESL, and foreign languages.
- The Basic Skills Study Center (Library – North Wing, upper level) provides individualized computer-assisted instruction in basic reading and basic math. Students may register for Academic Strategies 1ab (AS 1abcd) or participate in a non-credit drop-in study program. Entering students will be given a diagnostic placement test and a personal plan of study. Both Academic Strategies and drop-in students will be provided with access to various software tutorial applications.
- 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 responsi-
ility 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.

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

- The ability to negotiate the campus facilities independently or with the assistance of their own attendant;
- The ability to take care of personal needs (feeding, toileting) unassisted or to provide one's own attendant care; and
- 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
- Website: www.elcamino.edu/academics/src

**Student Health Services**

Student Health Services is located on the south side of campus, adjacent to the swimming pool. Walk-in hours are Monday, 8:30 a.m. to 5:00 p.m., Tuesday, 8:30 a.m. to 12:30 p.m., Wednesday, 8:30 a.m. to 4:30 p.m., Thursday, 8:30 a.m. to 1:00 p.m. and 3:00 p.m. to 7:00 p.m., and Friday, 8:30 a.m. to 12:00 p.m. HIV Clinic hours are on Tuesday from 1:00 p.m. to 4:00 p.m.

The Health Center is staffed by nurse practitioners, registered nurses, physicians, clinical psychologists, and chiropractors. Students are seen on a walk-in basis or may be scheduled for an appointment with physicians, psychologists, nurse practitioners, or chiropractors.

Some of the free services provided are general medical care and treatment, first aid, family planning, and health education. Short term psychological counseling on an individual basis by psychologists is free of charge. Lab services such as Pap smears, blood tests, or pregnancy tests are available at low cost.

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 students 18 years of age or older who pay the mandatory health fee. 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 health fee and submit a parental or guardian consent form to receive health services.

**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 Financial Aid Office, CalWORKs/Care, Career Placement Services, EOP&S, First Year Experience, and the Assessment/Test 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 normally from 9:00 a.m. to 6:00 p.m., Monday, Tuesday, Thursday and 9:00 a.m. to 7:00 p.m. on Wednesday. The Information Desk is also open from 8:00 a.m. to 4:30 p.m. Friday.

**Assessment/Test Center**

The Assessment/Test Center is located in Room 217, on the second floor of the Student Services Center building. English, ESL and Mathematics Placement Testing is 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, and Mathematics Placement Tests, the Assessment/Test Center also administers the following exams: Ability-to-Benefit, Chemistry Placement, Contemporary Health, DRP, and Mathematics Competency. Contact the Assessment/Test Center for further information or refer to the El Camino College Assessment/Test Web page at www.elcamino.edu/studentservices/co/assessmenttesting.asp.

**Transfer Center Services**

Transfer services are offered Monday through Thursday from 9:00 a.m. to 6:00 p.m. in the Counseling Services Center on the first floor of the Student Services Center building. The Transfer Center offers a wide range of 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 services 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 each semester. Also, information about public and private colleges and universities is available through the Transfer Center. Visit us online at http://www.elcamino.edu. Go to Counseling Services for links to help you: Choose and apply to universities online, take virtual campus tours, explore majors, and much more.

**Veterans Services**

The Veterans Administration pays 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 Office located in the Admissions Office (Student Service Center Room 101), telephone number 310-660-3486. 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 the Veterans Administration.

Students collecting V.A. 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 V.A. The V.A. 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 disabilities may be eligible for a special vocational rehabilitation program offered by the Veteran's Administration. Contact the local V.A. office for more information at 1-800-827-1000.

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

Because timely receipt of benefit checks cannot be assured by the V.A., 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.

In most cases, eligibility for benefits expires 10 years after last discharge or release from active duty. For more information, call the Veteran’s Administration toll free information line at 1-800-827-1000, the Education Service line at 1-888-442-4551, or go to www.gibill.va.gov.

Writing Center

The Writing Center, located in Humanities 122, serves all El Camino College students who need assistance with writing and reading. The Center offers either one-on-one conferences with highly qualified tutors, all of whom have a bachelor’s or master’s degree, or computer-assisted instruction on Microsoft Word, Internet access, and the use of composition, editing, or reading software. In addition, the Center offers weekly workshops on grammar, documentation, and specialized writing tasks such as cover letters and resumes.

To receive services, students must bring their El Camino College identification card, a disk or flash drive if they intend 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. A referral from an instructor or counselor is desirable. Writing Center hours are 8:00 a.m. to 6:00 p.m., Monday through Thursday; 8:00 a.m. to 4:30 p.m., Friday. The Center phone number is 310-660-3873. Please visit the Center’s website for more information: www.elcamino.edu/academics/humanities/writingcenter/index.asp.

Student Development

The El Camino College Activities Center serves as headquarters for all student organizations.

The center, usually open from 8:00 a.m. to 5:00 p.m. Mondays through Fridays, offers a social atmosphere where students may meet and mingle or study between classes. The building is headquarters for Associated Students, the Student Senate, Inter-Club Council, Alpha Gamma Sigma, and all related activities.

Everyone who is registered at El Camino College is a member of the Associated Students. Officers of the organization are elected each year. Associated Students 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 Director of Student Development is assisted by a professional staff which works with the membership to sponsor such activities as workshops, lectures, and social events.

Overall leadership of the Senate is provided by the Associated Student President and three Directors. The President, the Director of Finance, the Director of Academic Affairs, and the Director of Student Services are elected at large in the spring.

Student Representative

A student 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 including homecoming, the semi-annual blood drive, a holiday party for children, and the international food fair. 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 Office of Student Development.

Alpha Gamma Sigma

Alpha Gamma Sigma, the Honor and Scholarship Society at El Camino College, was founded to help promote, maintain and recognize scholastic achievement and community service among students. Because AGS also is a student club and one of the largest organizations on campus, it attracts many students, of all majors, pursuing academic excellence. In addition to supporting the academic endeavors of its members through study groups, tutorials and scholarship opportunities, the club also offers ways to gain leadership positions, participate in community service, and meet others with similar academic interests. For information on joining AGS and to obtain an application, contact the Student Development Office.

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), scholarships, and loans.

Detailed information, application forms, and professional financial aid advising are available in the Financial Aid Office in Room 215 of the Student Services Center. Application Workshops are available to assist students with Financial Aid applications. Call or visit the Financial Aid Office for workshop schedules.

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

- Apply for financial aid using the Free Application for Federal Student Aid (FAFSA), the renewal FAFSA, or online at www.FAFSA.ed.gov;
- Be a United States citizen, permanent resident, or eligible non-citizen;
- Be a high school graduate or have completed the GED or passed an independently administered test that is approved by the Secretary of the Department of Education (ability to benefit or ATB);
- Be enrolled in good standing;
- Maintain Financial Aid Satisfactory Academic Progress;
- Demonstrate financial need;
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;

Not be in default on any educational loan and not owe a refund on a grant received for attendance at any post-secondary institution.

Federal Refund Requirements

Students who withdraw from all classes prior to completing 60% 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 midpoint of the semester for a student who leaves without notifying the college, or
3) the student’s last date of attendance at a documented academically-related activity.

Cal Grant B

Cal Grant B awards range from $776 to $1,551 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, you must complete the Free Application for Federal Student Aid (FAFSA) and the California Chafee Grant application, which is available online at 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 $400 to $4,731 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.

Academic Competitiveness Grant

The Academic Competitiveness Grant award is for students who graduated from high school after January, 2005. Students must have completed rigorous high school academic courses. Academic Competitiveness Grant awards range from $750 to $1,300 a year.

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 by writing the Bureau’s Office of Indian Education, 2800 Cottage Way, Sacramento, CA 95825.

Federal Work Study

Students may earn $8.00 an hour, or more depending upon job assignment. Students may work 20 hours a week while school is in session and up to 40 hours a week during break periods. Funding is based on financial need and available funds.

Federal Parents Loan For Undergraduate Students (PLUS)

PLUS loans provide funds to qualified parents of dependent students. The interest rate is variable and is adjusted annually by July 1. As with the Stafford Student Loan Program, these loans are made by banks, savings and loan associations and credit unions.

Parents who do not have an adverse credit history may borrow from the PLUS program up to the total cost of the student’s education, minus aid received by the student.

Federal Stafford Loans

Federal Stafford Loans are available through participating banks and other lenders. The maximum loan amount is $3,500 for first-year students and $4,500 for second-year students. The interest rate is variable. No repayment is required when the student is in school or during grace and deferment periods. Repayment begins six months after graduation or when the student ceases to be enrolled at least half-time.

Middle and higher income students may borrow for education costs in the Federal Unsubsidized Stafford Loan Program. Students may borrow within the loan limits and at the same interest rates as the regular Stafford Loan Program. Students may also borrow both a subsidized and unsubsidized Stafford loan, but the total may not exceed Stafford loan limits.

With the exception of demonstrating financial need, borrowers must meet all eligibility criteria of the regular Stafford Loan Program. Interest payments must begin immediately after the loan is fully disbursed or may be added to the principal balance. Regular repayment begins six months after the borrower graduates or ceases to be enrolled at least half-time.
Board of Governors Enrollment Fee Waiver - 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.

Board of Governors Enrollment Fee Waiver - Method A

For this waiver, students must be receiving TANF, SSI, or General Assistance and be legal residents of California. The BOGW 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 $26 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.

Board of Governors Enrollment Fee Waiver - Method B

For this waiver, students must meet low income criteria and be legal residents of California. The BOGW application must be completed and a copy of the 2009 IRS 1040 Income Tax Return must be submitted. Students are awarded up to $26 a unit per semester, based on enrollment status. This is not a cash award to students, but is simply a waiver of enrollment fees.

Income Criteria Chart - 2010-2011 Academic Year

<table>
<thead>
<tr>
<th>Number in Household (Including Student)</th>
<th>Family Income 2009 (Adjusted Gross Income or Untaxed Income)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$15,600 or less</td>
</tr>
<tr>
<td>2</td>
<td>$21,000 or less</td>
</tr>
<tr>
<td>3</td>
<td>$26,400 or less</td>
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<tr>
<td>4</td>
<td>$31,800 or less</td>
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<tr>
<td>5</td>
<td>$37,200 or less</td>
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<td>6</td>
<td>$42,600 or less</td>
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<td>7</td>
<td>$48,000 or less</td>
</tr>
<tr>
<td>8</td>
<td>$53,400 or less</td>
</tr>
<tr>
<td>+</td>
<td>Add $5,400 for each additional dependent</td>
</tr>
</tbody>
</table>

You will be asked to provide documentation of income.

Board of Governors Enrollment Fee Waiver - Method C

For this waiver, students must demonstrate financial need and be legal residents of California. Eligibility is based on the completed FAFSA. Students are awarded $26 a unit per semester based on enrollment status. This is not a cash award to students, but is simply a waiver of enrollment fees.

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

Board of Governors Enrollment Fee Waiver - Online Application

Students may complete and submit the Online Application at www.cccapply.org when it becomes available. An estimated fee waiver will be awarded based on the information provided on the application. Students must bring in additional documentation to the Financial Aid Office. The award will remain in estimated status and the enrollment fee will not be waived until the student submits all required documentation.

Scholarships

Valuable scholarships are available to El Camino College students as a result of the many community patrons and organizations which have established awards as a way to express confidence in the college and in its students. Funds associated with these scholarship awards allow students to continue their educational objectives at El Camino College as well as to transfer to other institutions. In addition to the scholarships listed below, the El Camino College Foundation has a scholarship program. Please see page 2 of this catalog for more information.

The El Camino College Scholarship online application opens during the middle of the fall semester and closes at the beginning of the spring semester. During the open period, a student may apply at http://portal.elcamino.edu and click the link titled "Scholarship Application." A simple five-step guide for students is provided on the application homepage. A minimum of six graded units, a minimum cumulative GPA of 2.0, and one letter of recommendation are required to qualify for this program. Further questions may be addressed by calling 310-660-6541 or by visiting the Scholarship Office located in Administration 119.

The college scholarship program gratefully acknowledges the continuing support of the following individuals, groups and memorial scholarship endowments:

- Alpha Gamma Sigma Matt Cook Scholarship
- Alpha Gamma Sigma Ed Martinez
- Alpha Gamma Sigma Dave Schlesinger
- American Association of University Women - Manhattan Beach Branch
- Robert H. Anderson Memorial Scholarship
- Art Department Scholarship
- Associated Students Scholarship
- Howard M. Banks Scholarship
- Margaret Brandt Nursing Scholarship
- Clarence Brown Memorial Scholarship
- Grace Elizabeth Karman Brown Scholarship
- California Association of Realtors
- Paula Carabelli Scholarship
- Mary Ann Collins Art Scholarship
- Corona Del Camino Scholarship
- Datatel Scholars Foundation
- Dollars for Scholars
- Frank Ego Memorial Scholarship
- El Camino College Alumni
- Henny & Rudolf Engelbarts Memorial Scholarship
- Lara Escobar Memorial Fund
- Stephen Fainsbert Real Estate Memorial Scholarship
- Frank Fowler Memorial Scholarship
- Robert Haag Music Scholarship
- Dean Hale Scholarship
- Jane Skinner Hardester Annual Music Scholarship
- Hands of Friendship Scholarship
- Hata Education Fund
- Honeywell E&S Scholarship
- Donald Jones Memorial Scholarship
- Robert D. Keitel Memorial Scholarship
- Rudy Kroon Memorial Award

2010-2011 El Camino College Catalog
Academic Honesty & Standards of Conduct

Board Policy 5500

Academic Honesty

El Camino College is dedicated to maintaining an optimal learning environment and insists upon academic honesty. To uphold the academic integrity of the institution, all members of the academic community, faculty, staff and students alike, must assume responsibility for providing an educational environment of the highest standards characterized by a spirit of academic honesty.

It is the responsibility of all members of the academic community to behave in a manner which encourages learning and promotes honesty and to act with fairness toward others. Students should not seek an unfair advantage over other students when completing an assignment, taking an examination, or engaging in any other kind of academic activity.

Standards of Conduct

Conduct at El Camino College must conform to the laws of the State of California, District policies, and campus rules and regulations. The El Camino College faculty, staff, and administration are dedicated to maintaining a positive learning environment. Optimal standards for behavior are essential to the maintenance of a quality college environment. These standards will apply to all students on campus, other college property or while attending any college-sponsored event. Violation of such laws, policies, rules, and regulations or behavior adversely affecting suitability as a student, will lead to disciplinary action. Disciplinary actions as noted in Administrative Procedure 5520 may be taken against any person who engages in behavior defined as misconduct.

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

I. DISHONESTY

a. Cheating, plagiarism (including plagiarism in a student publication), or engaging in other academic dishonesty including but not limited to:

i. 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.

ii. Copying from another student or former student or allowing another student to copy from one’s work.

iii. Allowing another individual to assume one’s identity or assuming the identity of another individual.

iv. Changing answers on a previously scored test, assignment, or experiment with the intent to defraud.

v. Inventing data for the purpose of completing an assignment, a laboratory experiment, or case study analysis with the intent to defraud.

vi. Obtaining or copying exams or test questions when prohibited by the instructor.

vii. 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.

viii. Using aids such as notes, calculators, or electronic devices unless specifically authorized by the instructor.

ix. Handing in the same paper or other assignment in more than one class when prohibited by the instructor.

x. Any other action which is not an honest reflection of a student’s own academic work.

b. Other forms of dishonesty, including but not limited to forgery or attempted forgery of any academic record; alteration or misuse of college documents, records or identification; or know-
ingly furnishing false information to the District.

- 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 typewritten class notes, except as permitted by any District policy or administrative procedure.

II. DISRUPTIVE BEHAVIOR, INAPPROPRIATE CONDUCT AND EXPRESSION

- Disruptive behavior, willful disobedience, profanity or vulgarity, or the open defiance of the authority of, or abuse of, college personnel.
- Any acts of aggression including verbal or physical actions that are intended to create fear, apprehension, or bodily harm.
- Lewd, indecent, or obscene conduct on District-owned or -controlled property, or at District-sponsored or supervised functions.
- Engaging in expression which is obscene, libelous or slanderous; or which so incites students as to create a clear and present danger that the commission of unlawful acts on college premises, other college property, or while attending any college-sponsored event, or the violation of lawful District administrative procedures, or the substantial disruption of the orderly operation of the District.
- Obstruction or disruption of teaching, research, administrative, disciplinary proceedings, or other authorized college activities including but not limited to its community service functions or to authorized activities held off campus. Obstruction or disruption includes but is not limited to the use of skateboards, bicycles, radios and roller skates.
- Failure to comply with the directions of a member of the college certificated personnel, college management or supervisory personnel, college staff member, or campus police acting within the scope of his or her duties.

III. DRUGS, ALCOHOL AND SMOKING

- Unlawful possession, use, sale, offer to sell, furnishing, or being under the influence of, any controlled substance listed in Sections 11053-11058 of the California Health and Safety Code, 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.
- Willful or persistent smoking in any area where smoking has been prohibited by law or by regulation of the college or District.

IV. THEFT, ROBBERY AND DAMAGE

- Committing or attempting to commit robbery or extortion.
- Caus ing or attempting to cause damage to District property at any location or to private property on campus.
- Stealing or attempting to steal District property at any location or private property on campus, or knowingly receiving stolen District property at any location or private property on campus.
- 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 on campus.

V. HARASSMENT AND THREATENING/VIOLENT BEHAVIOR

- Caus ing, attempting to cause, or threatening to cause physical injury to another person including but not limited to: assault, battery, sex crimes including sexual assault or rape.
- Committing sexual harassment as defined by law or by District policies and procedures.
- Engaging in harassing, hazing, or injurious behavior for any reason or discriminatory behavior based on race, sex, [i.e., gender] sexual orientation, religion, age, national origin, disability, or any other status protected by law.
- Willful misconduct which results in injury or death to a student or to college personnel.

VI. WEAPONS AND MISUSE OF FACILITIES

- Possession, sale or otherwise furnishing any firearm, knife, explosive, or other dangerous object, including but not limited to any facsimile firearm, knife or explosive, unless, in the case of possession of any object of this type, the student has obtained written permission to possess the item from the appropriate State agency and a District employee, which is concurred in by the college president.
- Unauthorized entry to or use of college facilities, equipment or supplies.

VII. MISCELLANEOUS

- Persistent or habitual serious misconduct where other means of correction have failed to bring about proper conduct.
- The commission of any act constituting a crime under California law, on campus or any district-owned property or at any college-sponsored event.

Student Discipline & Due Process Procedure

Administrative Procedure 5520

Disciplinary Action

Disciplinary action appropriate to the misconduct as defined in BP 5500 may be taken by an instructor [see items C-1 and 5 below], the Director of Student Development or his or her designee [see items C-1, 2, 3, 4, 6, and 7 below], and the Board of Trustees [see item C8 below].

A. Consequences for Academic Dishonesty

When an instructor has determined that there is evidence of dishonesty in any academic work, the student may receive a failing grade for that piece of work and disciplinary action may be pursued. Any or all of the following actions may be imposed:
1. The instructor may assign a failing grade [no credit] to an examination or assignment in which academic dishonesty occurred.
2. The instructor may remove the student from the class or activity for the day of the incident and one additional class day as stipulated in C.5 of this procedure.
3. The instructor may complete the appropriate reporting forms [Disciplinary Form C – Academic Dishonesty Report Form and/or Disciplinary Form B – Notice of Suspension from Class/Lab/Library] and submit them along with a copy of the evidence to the Director of Student Development or his or her designee. This information will be placed in the student file.
4. If there is evidence of serious or repeated violations of academic honesty, the college may pursue additional disciplinary action in accordance with the disciplinary measures outlined in this procedure.

B. Notify Campus Police

Misconduct as noted in BP 5500 sections II, III, IV, V and VI should be brought to the immediate attention of the Campus Police or local police department/security force [for courses taught off campus]. This does not preclude a staff member from calling Campus Police for any other misconduct that warrants such action. Campus Police are to be called immediately and a police report will be written with notice to the Director of Student Development, or his or her designee.

C. Discipline

The following types of disciplinary action may be taken or pursued by the college:
1. Warning - A verbal or written notice, given to the student by a faculty member, the Director of Student Development, or his or her designee, or any college manager or delegated authority that continuation or repetition of the specified conduct may be cause for other disciplinary action. A copy of such action shall be sent to the Director of Student Development or his or her designee and placed in the student file.
2. Reprimand - A written reprimand for violation of specified regulations sent to the student by the Director of Student Devel-
opment, or his or her designee, noting that continued violations may result in further disciplinary action. The Director of Student Development or his or her designee shall place a copy of this reprimand in the student file.

3. Restitution - A letter from the Director of Student Development, or his or her designee, requesting reimbursement for damage or misappropriation of property will be sent to the student. A copy of this letter will be sent to the student file, Dean of Enrollment Services, and the Vice President of Student and Community Advancement. Reimbursement may take the form of appropriate service to repair or otherwise compensate for the damage.

4. Disciplinary Probation - Exclusion from college activities or services set forth in the notice of disciplinary probation. It may include one or all of the following and may be imposed upon an individual or groups of students.

- a. Removal from any or all college organization offices.
- b. Denial of privileges or participation in any or all college or student-sponsored activities or services. Disciplinary probation may be imposed for a period not to exceed one year. Repetition of conduct resulted in disciplinary probation may be cause for suspension or further disciplinary action. A written statement from the Director of Student Development, or his or her designee, will state those activities from which the student will be excluded. A copy of the disciplinary probation letter will be sent to the student file, Dean of Enrollment Services, Vice President of Student and Community Advancement, and Campus Police.
- c. Requirement to complete one or more counseling or behavioral modification programs or classes including but not limited to drug/alcohol diversion program, anger management workshop, interpersonal communication workshop, life-skills class, Special Resources Center program and academic or psychological counseling appointments.

5. Removal by Instructor - In cases of academic dishonesty or disruptive behavior, an instructor may remove (suspend) a student from his or her class for the day of the incident and the next class meeting. During this period of removal, a conference shall be held with the instructor and the student in an attempt to resolve the situation that led to the student’s removal.

- a. If a student is suspended for one class meeting, no additional formal disciplinary procedures are necessary. A record of the suspension should be sent to the Director of Student Development or his or her designee and placed in the student file.
- b. If a student is suspended from class for the day of the incident and the next class meeting, the instructor shall send a written report of the action to his or her dean who shall forward this information to the Director of Student Development, or his or her designee. The Director of Student Development, or his or her designee, shall send copies to the Vice President of Student and Community Advancement and the President. If the student removed by an instructor is a minor, the Director of Student Development, or his or her designee, shall ask a parent or guardian of the student to attend a parent conference with the instructor regarding the removal as soon as possible. A college administrator shall attend the conference if any party (instructor, parent, or guardian) so requests.

- c. The instructor may recommend to his or her dean that a student be suspended for longer than two class meetings. If the dean, instructor, and student cannot resolve the problem, the recommendation for a suspension of more than two class sessions will be referred to the Director of Student Development, or his or her designee, for possible actions described in Section 6 of these procedures.

- d. During the period following the initial suspension from class for the day of the incident and the following class meeting, the student shall be allowed to return to the class until due process and the disciplinary procedures are completed unless the student is further suspended as a result of actions taken as defined in Section 6 of these procedures.

6. Suspension - The Director of Student Development, or his or her designee, may suspend a student as follows:

- a. From one or more classes for a period of up to ten days of instruction; or
- b. From one or more classes for the remainder of the term; or
- c. From one or more classes and activities of the community college for one or more terms not to exceed a period of two years. The Director of Student Development, or his or her designee, shall send the notice of suspension to the student, the student file, Dean of Enrollment Services, Vice President of Student and Community Advancement, President, and Campus Police. Whenever a minor is suspended from the college, the parent or guardian shall be notified in writing by the Director of Student Development, or his or her designee.

7. Immediate Suspension - Any college manager or college delegated authority during non-school hours, may immediately suspend a student from the campus in an emergency action to protect lives or property and to insure the maintenance of order. Within twenty-four (24) hours or the next regular work day of the suspension, the college manager or college delegated authority shall send to the Director of Student Development, or his or her designee, a written report of the suspension. The Director of Student Development, or his or her designee, shall send a written notice to the suspended student, informing the student of his or her right to a hearing within ten (10) business days of the suspension. A copy of this notice will be sent to the student file, Dean of Enrollment Services, Vice President of Student and Community Advancement, President, and Campus Police.

Immediate suspension will be enforced for the following types of student misconduct:

- a. Possession or use of any weapon, firearms, or explosives.
- b. Willful misconduct which results in injury or death to a student or college personnel.
- c. Assault, battery, sex crimes, including sexual assault, or rape.

When there is probable cause to believe that a student has committed any of the above actions, that student will be immediately suspended from the campus by any college manager or college delegated authority. Within twenty-four (24) hours or the next regular work day after the suspension, the manager or college delegated authority shall send to the Director of Student Development, or his or her designee, a written report of the suspension. The Director of Student Development, or his or her designee, will then send a written notice to the suspended student, informing the student that he or she has been suspended for the remainder of the semester at a minimum and/or up to two years at a maximum and that he or she has the right to a hearing within ten (10) business days of the suspension.

8. Expulsion - The termination of student status for an indefinite period of time. 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 the student or others. The notice of expulsion will be sent to the student with copies to the student file, Director of Student Development, Dean of Enrollment Services, Vice President of Student and Community Advancement, President, and Campus Police. The expulsion of a student shall be accompanied by a hearing if requested by the student. The Board of Trustees shall consider any recommendation from the Superintendent/President for expulsion at the next regularly scheduled meeting of the Board 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). The student shall be notified in writing, by registered or certified mail or by personal serv-
Due Process Disciplinary Procedures

A. Lodging of Charges

1. Charges of misconduct against a student, as defined in Sections I through VII of Board Policy 5500, may be lodged by any person who has personal knowledge of facts indicating that the student participated in the alleged misconduct. Such a witness shall hereinafter be referred to as the “complainant” and the person being charged as the “accused.”

2. The complainant must first lodge his or her charge(s) with a responsible manager at the level of director or above.

3. The responsible manager will review the charge(s). The manager will then either:
   a. attempt to informally resolve the issue(s) or
   b. recommend disciplinary action.

4. If the responsible manager recommends disciplinary action, he or she will forward the charge(s) to the Director of Student Development, or his or her designee. The Director of Student Development or his or her designee shall review the charge(s) and make an independent determination as to whether or not the conduct charged amounts to misconduct as defined in Items I through VII of Board Policy 5500 and whether disciplinary action should be brought against the accused.

5. If disciplinary action is appropriate, the Director of Student Development, or his or her designee or appropriate administrator shall give the accused a written notice of the lodging of charges, the specified acts of misconduct and the proposed disciplinary action. The accused will be notified of his or her right to request a hearing within five (5) business days. A copy of this policy will be included with the notice. If the student does not request a hearing, the proposed disciplinary action will be taken.

B. Hearing of Charges

1. Scheduling of Hearing
   a. Students who are placed on immediate suspension. If the student has been suspended prior to a hearing, the hearing shall be commenced within fifteen (15) business days of the ordered suspension.
   b. Students who have not been placed on immediate suspension:
      [1] The accused shall receive written notice of the charge(s) giving rise to the proposed disciplinary action.
      [2] The accused has five (5) business days after receipt of written notice of the charge(s) to request a hearing before the Disciplinary Hearing Committee. Failure to request such a hearing in writing within this five day period, or failure to appear at such hearing will constitute a waiver of his or her right to a hearing pursuant to these procedures. Unless the hearing may result in expulsion, the accused is not entitled to representation by counsel. If the accused wishes to be represented by counsel at an expulsion hearing, the accused shall provide written notice in the request for hearing of the intention to be represented. If the accused is a minor, he or she shall be entitled to be accompanied by his or her parent or guardian at any hearing before the Disciplinary Hearing Committee.

3. The Disciplinary Hearing Committee shall be chaired by the Director of Student Development, or his or her designee who will serve as the hearing officer and have as members one representative from each of the following groups: the Academic Senate, the Classified Employees, the Student Senate, and College Management.

4. If the accused requests a hearing, the Director of Student Development, or his or her designee shall schedule a disciplinary hearing to take place within fifteen (15) business days of the receipt by him or her of the written request for a hearing.

5. The Director of Student Development or his or her designee shall give the accused and members of the Disciplinary Hearing Committee written notice of the time, place and date set for the hearing.

6. If the accused does not request a hearing, the Director of Student Development, or his or her designee may finalize the disciplinary action with the exception of expulsion, which must be recommended to the Vice President of Student and Community Advancement. If the Vice President determines that expulsion is appropriate, he or she will recommend expulsion to the Board of Trustees for final approval.

2. How Hearing is to be Conducted
   a. The public shall be excluded from this hearing.
   b. The hearing shall be recorded by either an audio recording or stenographic recording.
   c. The hearing officer may conduct the hearing in any manner he or she deems appropriate, provided the accused is given the opportunity to confront the witnesses testifying against him or her and to offer the statements of any supporting witnesses.
   d. If the Disciplinary Hearing Committee finds adequate support for the charge(s), it shall take appropriate disciplinary action pursuant to Section I.C of this procedure.
   e. When the Disciplinary Hearing Committee reaches a decision, the accused shall be given written notice in a timely manner of the decision, the disciplinary action, if any, to be taken, and the right to appeal the decision to the Vice President of Student and Community Advancement.

C. Review by the Vice President of Student and Community Advancement

1. The accused may seek review of the decision of the Disciplinary Hearing Committee by delivering to the Vice President of Student and Community Advancement no later than five (5) business days after notice to the accused of the Disciplinary Hearing Committee’s decision, a signed statement containing:
   a. A statement that the accused appeals the decision; and
   b. A brief statement of why the accused considers the decision to be in error.

2. The Vice President of Student and Community Advancement 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 the Disciplinary Hearing Committee was in error or the sanctions imposed were excessive in light of the seriousness of the charge(s).

3. If the Vice President of Student and Community Advancement determines that review is not appropriate, he or she shall, within ten (10) business days after receipt of the accused’s request for review, send written notice to the accused denying review and affirming the decision of the Disciplinary Hearing Committee.

4. If the Vice President of Student and Community Advancement determines that review is appropriate, he or she shall, within ten (10) business days after receipt of the request for review, schedule a meeting giving the accused at least five (5) business days written notice thereof with the accused and the hearing officer, at which time the accused will be allowed to present his or her objections to the Disciplinary Hearing Committee’s decision, and the hearing officer will be allowed to respond thereto.
5. After such a meeting, the Vice President of Student and Community Advancement may reverse, revise or modify the decision and the disciplinary sanctions therein imposed on the accused, or the Vice President may let the decision and disciplinary sanctions stand.

D. General Provisions

1. If students or other persons are suspended or expelled from the campus, they shall not appear on the campus without permission from the Vice President of Student and Community Advancement or designee and must have a Campus Police escort.
2. The time limits specified in the Due Process and Disciplinary Procedures may be shortened or extended if there is a mutual written concurrence between the parties.
3. Failure of the accused to appeal any determination at any step to another step within the specified time limits shall be deemed acceptance by the accused of the last determination rendered.
4. Written notice to an accused pursuant to these procedures shall be sufficient if sent by first class mail to the last known address of the accused currently on file with the college. Notice shall be deemed given on the day of said mailing. Notice shall be in the English language.
5. In the absence of the Director of Student Development, a designee may be appointed by the Vice President of Student and Community Advancement.
6. No student shall be removed, suspended or expelled unless the conduct for which the student is disciplined is related to college activity or college attendance. In addition, no student may be removed, suspended, or expelled for parking violations.
7. The President or the President’s designee (Campus Police) shall, upon the suspension or expulsion of any student, notify the appropriate law enforcement authorities of Los Angeles County or the City of Torrance of any acts of the student which may be in violation of Section 245 of the California Penal Code - Assault with a deadly weapon or force likely to produce great bodily injury.

Time Limits:

Any times specified in these procedures may be shortened or lengthened if there is mutual concurrence by all parties.

Student Rights and Grievances
Administrative Procedure 5530

The purpose of this procedure is to provide a prompt and equitable means for resolving student grievances. These procedures shall be available to any student who reasonably believes a College decision or action has adversely affected his or her status, rights or privileges as a student. The procedures shall include, but not be limited to, grievances regarding:

1. Sex discrimination as prohibited by Title IX of the Higher Education Amendments of 1972
2. Sexual harassment as defined in Board Policy 3430
3. Financial aid
4. Illegal discrimination
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 covered under Board Policy 5500 and Administrative Procedure 5520.
2. Police citations (i.e. “tickets”). Complaints about citations shall be handled under the procedures described in Board Policy 5520.
3. Course grades to the extent permitted by Education Code Section 76224(a). Grade appeals are addressed in Board Policy 4231 and Administrative Procedures 4231.

Definitions:

1. Party: The student or any persons claimed to have been responsible for the student’s alleged grievance, together with their representatives. “Party” shall not include the Grievance Hearing Committee or the College Grievance Officer.
2. Superintendent/President: The Superintendent/President or a designated representative of the Superintendent/President.
3. Student: Any 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. Respondent: Any person claimed by a grievant to be responsible for the alleged grievance.
5. Business Day: Unless otherwise provided, business day shall mean a day Monday to Friday, excluding public holidays and weekends, during which the College is in session and regular classes are held.
6. Grievance Officer: Appointed by the Superintendent/President or designee to assist in seeking resolution by informal means.

Grievance Hearing Committee:

The Superintendent/President or designee shall at the beginning of each semester, including any summer session, 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 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 of 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 Hearing Committee to facilitate a full, fair and efficient resolution of the grievance, and shall avoid an adversarial role.

Informal Resolution:

1. Each student who has a grievance shall make reasonable effort to resolve the matter on an informal basis prior to requesting a grievance hearing, and shall attempt to solve the problem with the person with whom the student has the grievance, that person’s immediate supervisor, or the local College administration.
2. 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 Student Organization in attempting to resolve a grievance informally.
3. Informal meetings and discussion between persons directly involved in a grievance are essential at the onset of a dispute and should be encouraged at all stages. An equitable solution should
be sought before persons directly involved in the case have stated official or public positions that might tend to polarize the dispute and render a solution more difficult.

4. At no time shall any of the persons directly or indirectly involved in the case use the fact of such informal discussion for strengthening the case for or against persons directly involved in the dispute or for any purpose other than the settlement of the grievance.

5. In an attempt to resolve a complaint informally, the student shall first request a meeting to discuss it with the Dean, Associate Dean or Director (hereinafter Administrator) of the division in which the matter in question resides. Upon such a request, the Administrator shall inform and confer with any staff members named by the student. In turn, the Administrator shall schedule a meeting with the student and, if requested, all involved parties not more than ten (10) business days from the date of request.

6. If an informal resolution of the complaint is not reached, which is satisfactory to the student, the student shall have the right to request a grievance hearing.

This concludes the Informal Process.

**Formal Resolution [Request for a Grievance Hearing]**

The student may process any complaint not resolved by the Informal Process. As set forth above, the student can process a grievance as follows:

1. The student shall submit his or her written grievance, on a form provided by the College, to the Grievance Officer (Dean of Enrollment Services or designee) within thirty (30) business days following the student’s first meeting with an Administrator.

2. The grievance shall be signed and dated by the student and shall incorporate a statement that the student had first followed the provisions of the Informal Process.

3. Within fifteen (15) business days following receipt of the request for a grievance hearing, the Dean of Enrollment Services or designee shall appoint a Grievance Hearing Committee, as described above. The Grievance Hearing Committee shall meet in private and, without the parties present, select a chair and determine based on the Statement of the Grievance whether it presents sufficient grounds for a hearing.

4. If the hearing is warranted, it shall be based on the following:
   a) The statement contains facts which, if true, would constitute a grievance under these procedures;
   b) The grievant is a student as defined in these procedures, which include applicants and former students;
   c) The grievant is personally and directly affected by the alleged grievance;
   d) The grievance was filed in a timely manner;
   e) The grievance is not clearly frivolous, clearly without foundation, or clearly filed for purposes of harassment.

5. If the grievance does not meet each of the above requirements, the Hearing Committee Chair shall notify the student in writing of the rejection of the Request for a Grievance hearing, together with the specific reasons 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 Hearing Committee.

6. Any appeal relating to a Grievance Hearing Committee decision that the Statement of Grievance does not present a grievance as defined in these procedures shall be made in writing to the Vice President of Student and Community Advancement within five (5) business days of that decision. The Vice President of Student and Community Advancement shall review the Statement of Grievance and Request for Grievance Hearing in accordance with the requirements for a grievance provided in these procedures, but shall not consider any other matters. The Vice President of Student and Community Advancement’s decision on whether or not to grant a grievance hearing shall be final and not subject to further appeal.

7. If the Request for Grievance Hearing satisfies each of the requirements, the College Grievance Officer shall schedule 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.

**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.


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. 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 him or herself, and may have the right to be represented by a person of his or her choice, except that an attorney shall not represent a party unless, in the judgment of the Grievance Hearing Committee, complex legal issues are involved. If a party wishes to be represented by an attorney, a request must be presented not 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. A 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 not 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 either audio recording or stenographic recording, and shall be the only recording made. No witness who refuses to be recorded may be permitted to give testimony. At the beginning of the hearing in the event the recording is by audio recording, the Grievance Hearing Committee Chair shall ask each person present to identify him or herself 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 unavailable.

11. Within ten (10) business days following the close of the hearing, the Grievance Hearing Committee shall prepare and send to the Dean of Enrollment Services 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 Enrollment Services or Designee’s Decision:**

1. Within fifteen (15) business days following receipt of the Grievance Hearing Committee’s decision and recommendations, the Dean of Enrollment Services or designee shall send to all parties his or her written decision, together with the Hearing Committee’s decision and recommendations. The Dean of Enrollment Services or designee may accept or reject the findings, decisions and recommendations of the Hearing Committee. The factual findings of the Hearing Committee shall be accorded great weight. If the Dean of Enrollment Services or designee does not accept the decision or a finding or recommendation of the Hearing Committee, the Dean of Enrollment 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 accused shall be given written notice of the decision, the disciplinary action, if any, to be taken, and the right to appeal.

2. The accused may seek review of the Dean of Enrollment Services or Designee’s decision by delivering to the Vice President of Student and Community Advancement, no later than ten (10) business days after notice to the accused of the Dean Enrollment Services or Designee’s decision, a signed statement containing:
   a. A statement that the accused appeals the decision; and
   b. A brief statement of why the accused considers the decision to be in error.

**Appeal**

1. The Vice President of Student and Community Advancement 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 the Dean Enrollment Services or Designee was in error or the sanctions imposed were excessive in light of the seriousness of the charge[s].

2. If the Vice President of Student and Community Advancement determines that review is not appropriate, he or she shall, within ten (10) business days after receipt of the accused’s request for review, send written notice to the accused denying review and affirming the decision of the Dean of Enrollment Services or Designee.

3. If the Vice President of Student and Community Advancement determines that review is appropriate, he or she shall, within ten (10) business days after receipt of the request schedule a meeting with the accused and the Grievance Hearing Committee Chair, giving the accused at least five (5) business days written notice. The accused will be allowed to present his or her objections to the Dean of Enrollment Services or designee’s decision, and the Grievance Hearing Committee Chair will be allowed to respond thereto.

4. After such meeting, the Vice President of Student and Community Advancement may reverse, revise or modify the decision and the disciplinary sanctions therein imposed on the accused, or the Vice President may let the decision and disciplinary sanctions 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.

**Time Limits:**

Any times specified in these procedures may be shortened or lengthened if there is mutual concurrence by all parties.

**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.

**Campus Security Act and Student Right to Know**

In accordance with the requirements of the Jeanne Clery Disclosure of Campus Security Policy and Crime Statistics Act, El Camino College is required to publish and distribute an annual 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: [http://www.elcamino.edu/police/](http://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.

Student Right to Know regulations require colleges to annually publish completion and transfer rates. This information is available through appropriate publications and mailings, and on the college website: [http://www.elcamino.edu/administration/studentprofile/ECC_College_CommunityProfiles.pdf](http://www.elcamino.edu/administration/studentprofile/ECC_College_CommunityProfiles.pdf).

**Sexual Assaults on Campus or at Campus-Sponsored Events**

The Board of Trustees and the employees of El Camino College are committed to maintaining a safe campus. Accordingly, the college has policies and procedures regarding sexual assaults on campus or at a college-sponsored event. Should an assailant be a student or staff member, the appropriate due process procedures as set forth in Board Policy 5138, Standards of Student Conduct/Due Process and Education Code Sections 87405 and 87334-87336 and appropriate sections of the respective union contracts are enforced.
Section III

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Associate Degree ...............Page 34
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Academic Affairs
Deans, Directors, and Academic Offices

El Camino College’s instructional courses and programs are organized and administered through academic divisions and academic offices under the direction of the Vice President of Academic Affairs. The Academic Affairs Office is located on the first floor of the Administration Building, room 116. Division offices normally are open from 7:45 a.m. to 4:30 p.m., Monday through Friday. Students may review the Student Learning Outcomes (SLOs) for all El Camino College Courses at www.elcamino.edu/academics/slo.

Behavioral and Social Sciences
Dr. Gloria E. Miranda, Dean
Office - Art and Behavioral Science Building, Room 320
310-660-3735

The Division of Behavioral and Social Sciences offers instruction in American studies, anthropology, child education, economics, education, global studies, history, human development, philosophy, political science, psychology, sociology, and women’s studies.

These courses are designed to provide students with the opportunity to examine and gain an understanding in these areas:
1. Political, social, and economic aspects of past and present cultures in preparation for the future;
2. Human values, ethical outlooks, moral standards and their importance in the development of personal worth, obligations and responsibilities; and
3. Psychological and social forces which shape human behavior and the impact of such forces on all facets of culture.

Business
Dr. Virginia L. Rapp, Dean
Office - Business Building, Room 107 310-660-3770

The Division of Business offers courses in accounting, computer information systems, finance, marketing, management, office administration, supervision, real estate, paralegal studies and law.

In these fields, curricula emphasize both theoretical and practical training and prepare the student to meet lower division requirements for transfer to four-year institutions or to enter directly into employment.

Fine Arts
Ms. Constance Fitzsimons, Dean
Office - Music Building, Room 101 310-660-3715

The Division of Fine Arts includes art, dance, film/video, music, photography, speech communication, and theatre. The courses are designed to enlarge the cultural life of the student, the school, and the community. In addition, art exhibits, theatre productions, musical theatre productions, choral and instrumental concerts, recitals, speeches, debates, and special workshops are offered as a means of providing opportunities for development of the talents of interpretive and creative expression.

The Fine Arts Division offers a variety of performances by nationally and internationally acclaimed artists through El Camino College’s Center for the Arts. Fine Arts students participate at select performances and residency workshops offered by many of these artists.

Health Sciences and Athletics
Mr. Rory Natividad, Dean
Office - Behavioral Sciences Building first floor, Art 101
310-660-3545

Dr. Kim Baily, Director of Nursing
Office - Technical Arts Building, TA 101B 310-660-3281
Ms. Dipte Patel, Director, Special Resource Center Office - Student Services Center, East Wing 310-660-3295

The Division of Health Sciences and Athletics offers education and training programs in the health sciences, kinesiology, co-educational physical education activities, adapted physical education, recreation, basic first aid, CPR, men’s and women’s athletics, educational development, and sign language/interpreter training.

Within the division, the kinesiology department provides extensive offerings in exercise science as well as a variety of lifetime and fitness activities including golf, aquatics, strength training, racquet sports, combatives, and aerobic programs. The exercise science program promotes health care through a wellness approach using extensive individualized assessments. The curriculum includes courses that prepare students for athletic training, personal trainer certification, senior fitness programs for successful aging, and for fitness and sports nutrition. The adaptive exercise program serves students who have a wide range of disabilities including spinal cord injuries, head traumas, MS, CP, and lung disease. Successful completion of the first aid courses will lead to Red Cross certification in first aid, CPR, and basic life support. Basic water safety instruction and lifeguard training courses are also available and may lead to Red Cross certification. The division provides opportunities for intercollegiate athletic competition in eleven men’s and ten women’s sports.

The health sciences programs include health education, exercise science, nursing, radiological technology, and respiratory care. Health education provides a survey of contemporary health issues designed to familiarize students with sound approaches to good health. The exercise science program promotes preventive health care through a wellness approach using extensive individual assessments leading to personalized interventions and program development. The registered nursing program includes requirements for the Associate in Science degree and prepares students to take the National Licensing Examination. The radiological technology (medical x-ray) program is an allied health specialty designed to provide courses which will prepare the student to function as a skilled radiological technologist. The respiratory care program is designed to provide the respiratory care science and clinical courses needed to prepare the student to function as a skilled respiratory therapist.

The Special Resource Center provides support services and auxiliary aids for students with disabilities.
Humanities

Mr. Thomas K. Lew, Dean
Office - Humanities Building, Room 322
310-660-3316

Dr. Barbara Jaffe, Associate Dean
Office - Humanities Building, Room 322

The Division of Humanities offers students the opportunity to engage in skills-building and liberal arts courses to further their educational goals. Through courses in academic strategies and library information science, students learn the skills they need to succeed in college courses. English as a Second Language courses provide proficiency in English, and developmental reading and writing classes assist students who need additional skills before entering college-level courses.

The division offers a wide variety of foreign language courses, including Chinese, French, German, Italian, Japanese, and Spanish. Journalism classes emphasize writing of news and feature stories, culminating in the weekly publication of the school newspaper. Once a year, a magazine production class publishes Warrior Life. Instruction in composition ranges from basic to advanced, and creative writing courses provide training for and support of poets and fiction writers. The literature courses broaden students' understanding and appreciation of writers and their texts throughout the ages. The division annually produces Myriad, a student literary journal, as well as Our Voices, a student developmental writing journal.

Industry and Technology

Dr. Stephanie Rodriguez, Dean
Office - Technical Arts Building, first floor, TA 102
310-660-3600

Dr. Thomas Jackson, Associate Dean
Office - Technical Arts Building, second floor, TA 207

The division offers courses that provide marketable skills by obtaining a certificate or an associate degree in these program areas: air conditioning and refrigeration, architecture, administration of justice, 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, manufacturing technology, paramedical technician, and welding. The division also offers courses in engineering technology, and nutrition and foods.

Learning Resources

Ms. Alice Grigsby, Director
Office - Library, Room 110
310-660-3525

Learning Resources offers a wide range of support programs and services to sustain and complement the teaching-learning programs of El Camino College. Current resources and well-equipped facilities are made available to both students and faculty. Services are provided by library services, the Learning Resources Center, open access computer labs, tutorial services, and video and audio-visual communication services. Programs include Distance Education that offers accredited college courses via television and computer.

Mathematical Sciences

Dr. Donald Y. Goldberg, Dean
Office - Math and Computer Science Building, Room 101
310-660-3200

The Division of Mathematical Sciences offers instruction to students in mathematics, computer science, and engineering. Mathematics courses include basic skills development, general education for students seeking university transfer, and specialized courses for future teachers. Full two-year programs for mathematics, computer science, and engineering majors are offered. The computer science program includes language courses in Java, C++ , and C#. The division faculty is proud of its distinguished reputation for rigorous preparation of future scholars, scientists, engineers, and others who will employ mathematics in their professions.

The division is dedicated to promoting student success at all levels. The Mathematics Study Center provides a place for group study and one-to-one tutoring on a drop-in basis. Many mathematics courses provide students the opportunity to use computational technology, such as graphing calculators, Mathematica, and MINITAB. The Mathematical Sciences Division administers the MESA and ASEM programs, which provide extensive academic and personal support for majors in science, engineering and mathematics.

Natural Sciences

Dr. Jean Shankweiler, Dean
Office - Life Science Building, Room 101
310-660-3343

The Division of Natural Sciences offers instruction in the biological and physical sciences for science and non-science majors. The division is comprised of six areas: astronomy, chemistry, earth sciences, environmental horticulture, life sciences, and physics. Earth sciences courses are offered in geography, geology, and oceanography. Life sciences courses are offered in anatomy, biology, field studies, microbiology, and physiology. The division provides a comprehensive lower division curriculum for science majors preparing to transfer to four-year universities. Also provided are general education courses that are designed to allow students to understand and apply the scientific method and to understand basic underlying principles of nature and the relevance to their lives.

The division maintains a planetarium and observatory with several telescopes for its instructional program in astronomy and for public outreach. With the Chronos star projector, faculty are able to display a realistic sky of the past, present, and future from different locations in the solar system. There are monthly open houses at the observatory and, when possible, planetarium shows are provided for schools and the public.

2010-2011 El Camino College Catalog
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 in 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 in 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 the individual to the local, state, national, and international communities. The College, through the awarding of an associate degree, strives to create an environment which stimulates greater individual creativity and achievement, personal and social responsibility, as well as ethical and technological awareness. The degree requirements lead students through patterns of learning experiences designed to develop certain capabilities and insights through general education and sufficient depth in a specific field of knowledge. El Camino College recognizes the need to provide a multidimensional, multicultural, and integrative general education curriculum, as the core of the associate degree. With this objective in mind, El Camino College pledges to develop and maintain a general education curriculum that promotes critical thinking and analytical skills, clear and precise expression, cultural and artistic sensitivity, personal growth, health, and self-understanding. General education curriculum will enhance appreciation and understanding of the scientific method and the relationships between science and other human activities. It will also develop an understanding of methods of inquiry regarding human behavior, foster an appreciation of how societies and social groups operate, and develop awareness of the ways people throughout the ages have responded to themselves and the world around them in artistic and cultural creations.

General Education Criteria for Associate in Arts and Associate in 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 which 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 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.

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

B. 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.
Graduation

To receive an Associate in Arts or an Associate in 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 2.00 or higher. A minimum of 12 of the required 60 degree applicable units must be successfully completed at El Camino College. A notation of “Graduation with Honors” is earned with a cumulative GPA of 3.5 or higher.

Students must file an Intent to Graduate From 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 in Arts or Associate in 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 - A minimum of 12 of the required degree applicable units must be successfully completed 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.


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 which 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 and winter terms) each academic year and receiving a letter grade, a 'W', P/NP designation 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 in Arts and an Associate in Science Degree upon the completion of the specific general education and major requirements for each degree as stated in the catalog.

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 listed in the curriculum section of this catalog. 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 A.A. or A.S. degree patterns that follow.
## Associate in Arts Degree and Associate in Science Degree Programs

### Associate in Arts Degree

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<thead>
<tr>
<th>Program</th>
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<tbody>
<tr>
<td>Administration of Justice*</td>
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<tr>
<td>Anthropology</td>
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<tr>
<td>Art</td>
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<tr>
<td>Childhood Education*</td>
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<td>Communication Studies</td>
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<td>Dance</td>
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<td>Economics</td>
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<td>English</td>
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<td>Ethnic Studies</td>
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<td>Film/Video*</td>
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<td>French</td>
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<tr>
<td>General Studies</td>
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<td>History</td>
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<tr>
<td>Japanese</td>
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<td>Journalism*</td>
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<tr>
<td>Liberal Studies [Elementary School Teaching]</td>
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<tr>
<td>Music</td>
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<tr>
<td>Paralegal Studies*</td>
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<tr>
<td>Philosophy</td>
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<tr>
<td>Physical Education</td>
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<tr>
<td>Political Science</td>
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<tr>
<td>Psychology</td>
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<tr>
<td>Real Estate*</td>
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<tr>
<td>Recreation</td>
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<tr>
<td>Sign Language/Interpreter Training*</td>
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<td>Sociology</td>
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<tr>
<td>Spanish</td>
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<td>Theatre</td>
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*Indicates Vocational Program

### Associate in Science Degree

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<tr>
<th>Program</th>
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<tr>
<td>Air Conditioning and Refrigeration*</td>
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<td>Architecture*</td>
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<tr>
<td>Astronomy</td>
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<tr>
<td>Automotive Collision Repair/Painting*</td>
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<td>Automotive Technology*</td>
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<td>Biology</td>
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<td>Business:</td>
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<td>Accounting*</td>
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<td>Business Administration*</td>
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<td>Business Management*</td>
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<td>Marketing*</td>
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<td>Office Administration*</td>
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<td>Chemistry</td>
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<td>Computer Aided Design/Drafting*</td>
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<td>Computer Information Systems*</td>
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<td>Computer Science</td>
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<td>Construction Technology*</td>
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<td>Cosmetology*</td>
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<td>Electronics and Computer Hardware Technology*</td>
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<td>Environmental Horticulture*</td>
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<td>Fashion*</td>
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<td>Fire and Emergency Technology*</td>
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<tr>
<td>General Science</td>
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<td>Geography</td>
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<td>Geology</td>
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<td>Industrial Technology</td>
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<td>Laboratory Technician (Medical)*</td>
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<td>Machine Tool Technology*</td>
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<td>Manufacturing Technology*</td>
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<td>Mathematics</td>
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<td>Photography*</td>
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<td>Physical Science</td>
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<td>Physics</td>
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<td>Pre-Dentistry</td>
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<td>Pre-Engineering</td>
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<td>Pre-Medicine</td>
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<td>Pre-Nursing</td>
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<td>Pre-Optometry</td>
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<td>Pre-Pharmacy</td>
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<tr>
<td>Radiologic Technology*</td>
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<tr>
<td>Respiratory Care*</td>
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<tr>
<td>Welding*</td>
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</tbody>
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*Indicates Vocational Program
Associate in Arts Degree

A. A. Degree Requirements

Refer to Page 34 for general requirements. Complete requirements specified under Section A, Section B, and Section C.

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 of 3 semester units

Anatomy 30, 32

Anatomy and Physiology 34A, 34B

Anthropology 1, 5

Astronomy 12, 20, 25

Biology 8, 10, 11, 12, 15, 16, 17, 18, 101, 102, 103, 104

Biotechnology 1, 2

Chemistry 1A, 1B, 4, 7A, 7B, 20, 21A, 21B

Geography 1, 6, 9

Geology 1, 2, 3, 4, 6, 15, 30, 32, 34, 36

Microbiology 33

Oceanography 10

Physical Science 25

Physics 1A, 1B, 1C, 1D, 2A, 2B, 3A, 3B, 11, 12

Psychology 31

2. SOCIAL AND BEHAVIORAL SCIENCE: minimum of 9 semester units

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

A. American Studies 7

History 101, 102, 105, 106, 108, 110, 111, 112, 122, 128

Women's Studies 1

B. Political Science 1, 5, 6, 8

C. Anthropology 2, 3, 4, 6, 7, 8, 9, 10, 11, 12

Business 17, 22

Child Development 103, 104

Communication Studies 5, 11, 14

Economics 1, 2, 5

Ethnic Studies 1

Geography 2, 5, 7

Global Studies 101

History 114, 129, 140, 141, 143, 145, 152, 154, 162, 163, 165, 175, 176, 178, 183, 184, 190

History of Science 11

Journalism 12, 21

Political Science 2, 3, 10

Psychology 2, 5, 7, 8, 10, 12, 15, 16, 22

Sociology 101, 102, 104, 107, 108, 112

3. HUMANITIES: minimum of 3 semester units

Architecture 104

Art 1, 2, 3, 4, 5A, 5B, 6, 7, 9, 108, 109, 150

Chinese 1, 2, 24

Communication Studies 8

Dance 1, 3

English 1B, 10, 12, 15A, 15B, 18, 20, 21, 22, 23, 26, 27, 28, 29, 30, 31, 33, 34, 35, 36, 39, 40A, 40B, 41A, 41B, 42, 43, 44, 46, 47, 48

Fashion 31

Film/Video 1, 3, 51, 52, 53, 54abc

French 1, 2, 3, 4, 5, 6, 24

German 1, 2, 3

Humanities 1

Italian 1, 2, 24

Japanese 1, 2, 3, 4, 25

Music 1, 3, 11, 12, 13, 15A, 15B, 16, 17

Philosophy 2, 3, 7, 10, 11, 12, 14, 23

Photography 150

Sign Language/Interpreter Training 15, 16, 17A, 17B, 202

Spanish 1, 2, 3, 4, 5, 6, 24, 52A, 52B

Theatre 1, 4, 8

4. LANGUAGE AND RATIONALITY: minimum of 6 units

One course from A and one course from B:

A. English Composition:

Business 27, 28

English 1A

Journalism 1

B. Communication and Analytical Thinking:

Business 29

Communication Studies 1, 3, 4, 5, 11, 12, 14

Computer Information Systems 13, 16, 80

Computer Science 1, 10

English 1B, 1C

Journalism 12

Mathematics 73, 80, 110, 111, 115, 116, 120, 130, 140, 150, 160, 161, 170, 180, 190, 191, 210, 220, 270

History 4, 5, 8

Psychology 3, 9A

Sociology 109

Supervision 27

5. HEALTH AND PHYSICAL EDUCATION: minimum of 3 semester units

Contemporary Health 1

Human Development 10

Physical Education 260

Physical Activity or Fitness Courses:

Dance 9ab, 10, 12ab, 14ab, 16ab, 17abcd, 19ab, 20abcd, 21abcd, 22ab, 23abcd, 25abcd, 26abcd, 32ab, 33abcd, 35abcd, 42ab, 43abcd, 51ab, 52abcd, 53ab, 54abcd, 61ab, 62abcd, 71ab, 72abcd

Physical Education 1ab, 2abc, 3abcd, 4abcd, 5abc, 6abc, 7abcd, 14abcd, 15abcd, 16abcd, 20abc, 21abcd, 25abcd, 26abcd, 35abc, 36abc, 45abcd, 46abc, 47abcd, 54abcd, 57abc, 58abc, 60abc, 61abc, 65abc, 66abc, 70abc, 71abc, 74abcd, 75abc, 76abc, 80abc, 81abc, 85abc, 86abc, 87abc, 101abcd, 102abcd, 105abc, 106abc, 110abc, 111abc, 115abc, 116abc, 120abc, 121abc, 125abc, 126abc, 130abc, 131abc, 132abc, 133abc, 135abcd, 204abcd, 208abcd, 218abcd, 221abcd, 224abcd, 232abcd, 235abc, 238abcd, 240abcd, 241abcd, 244abcd, 245abcd, 246abcd, 250abcd, 251abcd, 253abcd, 256abcd, 275, 280, 282abcd, 285abcd, 300abcd, 302abcd, 400abcd, 401abcd, 402abcd, 404abcd, 407abcd, 409abcd

Nutrition and Foods 11

(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.)

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.

Mathematics 73, 80, 110, 111, 115, 116, 120, 130, 140, 150, 160, 161, 170, 180, 190, 191, 210, 220, 270
Psychology 9A
Sociology 109

OPTION II: CSU TRANSFER REQUIREMENTS
See page 39 of this catalog.

OPTION III: CSU/UC [IGETC] REQUIREMENTS
See page 40 of this catalog.

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 6 units of Physical Education as elective credit for graduation.

Transfer Major
60 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 4 units of Physical Education as transfer credit.

Associate in Science Degree

A. S. Degree Requirements
Refer to Page 34 for general requirements. Complete requirements specified under Section A, Section B, and Section C.

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 of 3 semester units
Anatomy 30, 32
Anatomy and Physiology 34A, 34B
Anthropology 1, 5
Astronomy 12, 20, 25
Biology 8, 10, 11, 12, 15, 16, 17, 18, 101, 102, 103, 104
Biotechnology 1, 2
Chemistry 1A, 1B, 4, 7A, 7B, 20, 21A, 21B
Geography 1, 6, 9
Geology 1, 2, 3, 4, 6, 15, 30, 32, 34, 36
Microbiology 33
Oceanography 10
Physical Science 25
Physics 1A, 1B, 1C, 1D, 2A, 2B, 3A, 11
Physiology 31
Psychology 7

2. SOCIAL AND BEHAVIORAL SCIENCE: minimum of 3 semester units
One course from A or B, or C:
A. American Studies 7
History 101, 102, 105, 106, 108, 110, 111, 112, 122, 128
Women's Studies 1
B. Political Science 1, 5, 6, 8
C. Anthropology 2, 3, 4, 6, 7, 8, 9, 10, 11, 12
Business 17, 22
Child Development 103, 104
Communication Studies 5, 11, 14
Economics 1, 2, 5
Ethnic Studies 1
Geography 1, 5, 6, 7, 9
Global Studies 101
History 114, 129, 140, 141, 143, 145, 152, 154, 162, 163, 165, 175, 176, 178, 183, 184, 190
History of Science 11
Journalism 12
Political Science 2, 3, 10
Psychology 2, 5, 7, 10, 12, 15, 16, 21, 22
Sociology 101, 102, 104, 107, 108, 112

3. HUMANITIES: minimum of 3 semester units
Architecture 104
Art 1, 2, 3, 4, 5A, 5B, 6, 7, 9, 10, 109, 150
Chinese 1, 2, 24
Communication Studies 8
Dance 1, 3
English 1B, 10, 12, 15A, 15B, 18, 20, 21, 22, 23, 26, 27, 28, 29, 30, 31, 33, 34, 35, 36, 39, 40A, 40B, 41A, 41B, 42, 43, 44, 46, 47, 48
Fashion 31
Film/Video 1, 3, 51, 52, 53, 54abc
French 1, 2, 3, 4, 5, 6, 24
German 1, 2, 3
Humanities 1
Italian 1, 2, 24
Japanese 1, 2, 3, 4, 25
Music 1, 11, 12, 13, 15A, 15B, 16, 17
Philosophy 2, 3, 7, 10, 11, 12, 14, 23
Photography 150
Sign Language/Interpreter Training 15, 16, 17A, 17B, 202
Spanish 1, 2, 3, 4, 5, 6, 24, 52A, 52B
Theatre 1, 4, 8

4. LANGUAGE AND RATIONALITY: minimum of 6 units
One course from A and one course from B:
A. English Composition:
Business 27, 28
English 1A
Journalism 1
B. Communication and Analytical Thinking:
Business 29
Communication Studies 1, 3, 4, 5, 11, 12, 14
Computer Information Systems 13, 16, 80
Computer Science 1, 10
English 1B, 1C
Journalism 12
Mathematics 73, 80, 110, 111, 115, 116, 120, 130, 140, 150, 160, 161, 170, 180, 190, 191, 210, 220, 270
Philosophy 5, 8
Psychology 3, 9A
Sociology 109
Supervision 27

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5. HEALTH AND PHYSICAL EDUCATION: minimum of 3 semester units
Contemporary Health 1
Human Development 10
Nutrition and Foods 11
Physical Activity or Fitness Courses:
Dance 9ab, 12abcd, 14ab, 16ab, 17abcd, 19ab, 20abcd, 21abcd, 22ab, 23abcd, 25abcd, 26abcd, 32ab, 33abcd, 35abcd, 42ab, 43abcd, 51ab, 52abcd, 53ab, 54abcd, 61ab, 62abcd, 71ab, 72abcd
Physical Education 1abcd, 2abcd, 3abcd, 4abcd, 5abc, 6abc, 7abcd, 14abcd, 15abc, 16abc, 20abc, 21abc, 25abc, 26abc, 35abc, 36abc, 45abc, 46abc, 47abcd, 54abcd, 57abc, 58abc, 60abc, 61abc, 65abc, 66abc, 70abc, 71ab, 74abcd, 75abc, 76abc, 80abc, 81abc, 85abc, 86abc, 87abc, 101abcd, 102abcd, 105abc, 106abc, 110abc, 111abc, 115abc, 116abc, 120abc, 121abc, 125abc, 126abc, 130abc, 131abc, 132abc, 133abc, 135abcd, 204abcd, 208abcd, 218abcd, 21abcd, 22abcd, 24abcd, 23abcd, 24abcd, 233abc, 238abcd, 240abcd, 241abcd, 244abcd, 245abcd, 246abcd, 250abcd, 251abcd, 253abcd, 256abcd, 275, 280, 282abcd, 285abcd, 300abcd, 302abcd, 400abcd, 401abcd, 404abcd, 407abcd, 409abcd
Psychology 2, 16, 22

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.
Mathematics 73, 80, 110, 111, 115, 116, 120, 130, 140, 150, 160, 161, 170, 180, 190, 191, 210, 220, 270
Psychology 9A
Sociology 109

OPTION II: CSU TRANSFER REQUIREMENTS
See page 46 of this catalog.

OPTION III: CSU/UC (IGETC) REQUIREMENTS
See page 42 of this catalog.

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
60 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.

Certificates
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. For specific certificate requirements, consult Section IV, Curriculum, of this catalog.

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.

Certificate of Achievement
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.

Certificate of Accomplishment
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 and Accomplishment Programs

Certificates of Achievement
Administration of Justice
Air Conditioning and Refrigeration/Heating, Ventilation, and Air Conditioning [HVAC] and Refrigeration
Architecture
Art/Digital Arts: Computer Animation
Art/Digital Arts: Digital Photography
Art/Digital Arts: Graphic Design
Art/Digital Arts: Illustration
Art/Digital Arts: Motion Graphics
Art/Digital Arts: Web Design
Art/Gallery Management
Art/Jewelry Design and Fabrication
Automotive Collision Repair/Painting I
Automotive Collision Repair/Painting II
Automotive Technology/Automotive Technician I
Automotive Technology/Automotive Technician II
Business/Accounting
Business/Bookkeeping Clerk
Business/Business Management
Business/Marketing
Business/Office Applications Specialist
Business/Retail Management
Childhood Education/Early Childhood Education
Childhood Education/Early Intervention Assistant
Childhood Education/Special Education Assistant
Computer Aided Design/Drafting
Computer Information Systems/Microcomputer Applications
Computer Information Systems/Microcomputer Support and Network Management
Computer Science
Construction Technology
Construction Technology/Cabinet and Fine Woodworking
Evaluation of Completion of Requirements

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

1. Catalog requirement: 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 the Associate Degree section of this catalog.) 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.

Preparation for Transfer

Students who wish to transfer to a four-year university or college should complete 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) needed for admission.

Since requirements can 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 advisor, 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 over the World Wide Web. It displays reports of how course credits earned at one California college can be applied at the receiving institution. ASSIST is the official repository of articulation for California’s public colleges and universities and therefore 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.

California State University Admission Requirements

1. Lower Division Transfer Requirements:

   Students who have completed 60 or fewer transferable semester units (or 89 or fewer transferable quarter units) with a 2.0 grade point average by the time of entry to a CSU are considered a lower division applicant. Students are eligible for admission if they:
   - Were eligible as a freshman at the time of high school graduation and
   - Were in good standing at the last college or university attended.
Some campuses may also expect students to complete, with a C or better, general education courses in English composition and general education mathematics prior to admission. Students should check the individual transfer campus to see if the campus is accepting lower division transfers at www.csumentor.edu.

2. Upper Division Transfer Requirements:
Students that have at least 60 transferable semester units (or 90 transferable quarter units) with a 2.0 grade point average (2.4 for non-residents) 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:
- Are in good standing at the last college or university attended and
- 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. 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/impactioninfo.shtml for additional information.

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 at the Records Window. 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 [9 units required]
One course from each subsection.
1. Communication Studies 1, 3, 4, 12
2. English 1A
3. English 1C, Philosophy 5, 8, Psychology 3, Communication Studies 4

Area B - Physical Universe and its Life Forms [minimum 9 units]
One course must be completed from each subsection; one course must include a laboratory (marked by *).

Note: An entry level mathematics Examination [ELM] is required by CSU unless the student is certified in area B3 by a community college.

1. Physical Sciences:
   - Astronomy 12*, 20, 25
   - Chemistry 1A*, 4*, 20*, 21A*
   - Geography 1, 6*, 9
   - Geology 1, 2, 3*, 4*, 6*, 15, 30*, 32*, 34*, 36*
   - Oceanography 10*
   - Physical Science 25*
   - Physics 1A*, 2A*, 3A*, 3B*, 11, 12*

2. Life Sciences:
   - Anatomy 30*, 32*
   - Anatomy and Physiology 34A*, 34B*
   - Anthropology 1, 5*
   - Biology 8*, 10*, 11*, 12*, 15, 16*, 17, 18*, 101*, 102*, 103

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

4. Mathematics/Quantitative Reasoning:
   - Mathematics 110, 111, 115, 120, 130, 140, 150, 160, 170, 180, 190, 210
   - Psychology 9A
   - Sociology 109

Area C - Arts, Literature, Philosophy and Foreign Languages [minimum 9 units]
At least one course from subsection 1 and one course from subsection 2.

1. Arts:
   - Architecture 104
   - Art 1, 2, 3, 4, 5A, 5B, 6, 7, 9, 108, 109, 150
   - Communication Studies 8
   - Dance 1, 3
   - Film/Video 1, 54abc
   - Music 11, 12, 13, 15A, 15B
   - Theater 1, 4, 8

2. Humanities:
   - American Studies 7
   - Chinese 1, 2, 24
   - Film/Video 52, 53
   - French 1, 2, 3, 4, 5, 6, 24
   - German 1, 2, 3
   - Humanities 1
   - Italian 1, 2, 24
   - Japanese 1, 2, 3, 4, 25
   - Philosophy 2, 3, 7, 10, 11, 23
   - Sign Language/Interpreter Training 15, 16, 17A, 17B, 202
   - Spanish 1, 2, 3, 4, 5, 6, 24, 52A, 52B

Area D - Social, Political and Economic Institutions and Behavior; Historical Background [minimum 9 units]
Courses must be selected from at least two different subsections. Courses listed in more than one subsection can be used for credit in one subsection only.

1. Anthropology and Archaeology:
   - Anthropology 2, 3, 4, 6, 7, 8, 9, 10, 11

2. Economics:
   - Economics 1, 2, 5

3. Ethnic Studies:
   - American Studies 3
   - Communication Studies 14
   - Ethnic Studies 1
   - History 108, 110, 111, 112, 122
   - Political Science 5
   - Psychology 10
   - Sociology 107

4. Gender Studies:
   - Anthropology 9
   - History 105, 106
   - Women’s Studies 1

5. Geography:
   - Geography 2, 5, 7

6. History:
   - History of Science 11

7. Interdisciplinary Social/Behavioral Science:
   - American Studies 7
### University of California Admission Requirements

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

A. Complete 60 UC transferable semester units (90 quarter units) with a minimum GPA of 2.4 [2.8 for non-residents].

B. 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.

C. Complete as many major preparation courses as possible. Major preparation may be viewed at [www.assist.org](http://www.assist.org).  

The University of California allows 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 not be able to transfer more than the 70 units of credit to the University.  

### 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 students, 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 at the Records Window.

### 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: English 1A**
- **Group B: One course from:** English 1C, Philosophy 5, Psychology 3, [The following two-course combinations acceptable if English 1B was taken prior to fall, 1993: English 1B and Philosophy 8 or English 1B and Psychology 3 [Psychology 3 stands alone if taken fall, 1992 or later]]
- **Group C [CSU transfers only]: One course from:** Communication Studies 1, 3, 4, 127

#### Area 2: Mathematical Concepts and Quantitative Reasoning

- One course, 3 semester or 4-5 quarter units: Mathematics 115a #, 120, 130+, 140, 150#, 160#, 161#, 180#, 190#, 191#, 210, 220, 270
- Psychology 9A?
- Sociology 109?
Area 4: Social and Behavioral Sciences
Three courses, 9 semester or 12-15 quarter units; at least one course from Arts and one course from Humanities:

A. Arts:
Art 1, 2, 3, 4, 5A, 5B, 6, 7, 9, 10, 108, 109, 150
Dance 1#, 3°
Film/Video 1&, 54abc
Music 11, 12, 13, 15A, 15B
Theatre 1, 4

B. Humanities:
American Studies 7
Chinese 27, 24
English 1B+, 10+, 12+, 15A, 15B, 18, 20, 21, 23, 26*, 28, 29, 30, 31, 34, 35, 36, 39, 40A~, 40B~, 41A#, 41B#, 42~, 44, 46α, 47, 48
Film/Video 52, 53
French 24
German 3
History 101, 102, 105, 106, 108, 110, 111, 112, 122, 128, 140, 141, 143, 145, 152, 154, 162, 163, 165, 175, 176, 177, 178, 184
Humanities 17
Italian 24
Japanese 2, 25
Philosophy 2, 3, 7, 10, 11, 23
Sign Language Interpreter Training 16?, 17A?, 202
Spanish 52A*, 52B*, 24+

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:
Astronomy 12, 20#, 25#
Chemistry 1A*, 1B*, 4#, 7A*, 7B*, 20*, 21A*, 21B*
Geography 1, 6*, 9
Geology 1, 2, 3*, 15*, 30*, 32*, 34*, 36*
Oceanography 10*
Physical Science 25#
Physics 1A*, 1B*, 1C*, 1D*, 2A*, 2B*, 3A*> , 3B*, 11#, 12*

B. Biological Sciences:
Anatomy 30*, 32*
Anatomy and Physiology 34A*, 34B*
Anthropology 1, 5
Biology 8*, 10#, 11*, 15, 16*, 17$, 18$, 101*, 102*, 103$
Microbiology 33*
Physiology 31*
Psychology 7

Honors Programs

Alpha Gamma Sigma
Alpha Gamma Sigma, the Honor and Scholarship Society, is a California Community College 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 cumulative 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.

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 in the Activities Center, at the AGS Information table during club rush week, and at AGS general meetings.

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 successfully to a university and complete a bachelor's degree. The program provides a unique learning environment which 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 Counseling Division, Student Services Center Building, first floor.

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 9 graded academic 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 completed (unless already completed) during the first semester in the program;
4. Attend four honors enrichment seminars during the program;
5. Complete two scheduled half-hour [Educational Plan] counseling appointments; and
6. Complete the requirements necessary to be accepted by the transfer institution in your major.

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. Colleges and universities involved in transfer agreements with El Camino College include UCLA, UC Irvine, Loyola Marymount University, Pomona College, Occidental College, UC Riverside, UC Santa Cruz, Chapman University, Pitzer College, CSU Dominguez Hills, CSU Fullerton, Cal Poly Pomona, San Diego State University, and CSU Long Beach.

Honors Transfer Program Benefits

Benefits include:
• Priority registration for all El Camino College classes
• Close academic and social interaction with other highly motivated honors students
• Enrollment in honors classes with smaller class size and taught by outstanding faculty
• Designation of the Honors Transfer Program on the El Camino College transcripts and on the El Camino College associate degrees
• A parchment quality Award of Achievement upon program completion
• An honors program counselor, director and assistant for special help and advisement
• Enrichment seminars which provide information leading to academic and personal growth
• Increased chances of receiving scholarships
• 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:

Anthropology 1 - Introduction to Physical Anthropology
Anthropology 2 - Introduction to Cultural Anthropology
Art 6 - Cross-Cultural Art
Astronomy 25 - Stars and Galaxies
Astronomy 20 - The Solar System
Biology 10 - Fundamentals of Biology
Communication Studies 1 - Effective Speaking
Communication Studies 3 - Group Discussion
Communication Studies 4 - Argumentation and Debate
Communication Studies 12 - Interpersonal Communication
Economics 1 - Principles of Economics: Macroeconomics
English 1A - Reading and Composition
English 1B - Literature and Composition
English 1C - Critical Thinking and Composition
Film/Video 1 - Film Analysis and Appreciation
Geography 5 - World Regional Geography
History 101 - United States History to 1877
History 102 - United States History from 1877 to the Present
History 122 - United States Social History: Cultural Pluralism in America
Music 12 - Music Cultures of the World
Oceanography 10 - Introduction to Oceanography
Philosophy 23 - Ethics, Law and Society
Political Science 1 - Governments of the United States and California
Political Science 10 - Introduction to International Relations
Psychology 5 - General Psychology
Sociology 101 - Principles of Sociology

In fulfilling the requirements for program completion, Honors Transfer Program students may include up to two of the following honors-level courses: Biology 101, 102; Chemistry 1A, 1B; Computer Science 1; Mathematics 190, 191; and Physics 1A, 1B.
Section IV

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Academic Support
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:

<table>
<thead>
<tr>
<th>High School Course</th>
<th>El Camino College Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algebra, first year</td>
<td>Mathematics 40 or Mathematics 33 and Mathematics 43</td>
</tr>
<tr>
<td>Algebra, second year</td>
<td>Mathematics 73 or 80</td>
</tr>
<tr>
<td>Geometry, one year</td>
<td>Mathematics 60</td>
</tr>
<tr>
<td>Trigonometry, one semester</td>
<td>Mathematics 170</td>
</tr>
<tr>
<td>Physics, one year</td>
<td>Physics 11 and 12</td>
</tr>
<tr>
<td>Chemistry, one year</td>
<td>Chemistry 4</td>
</tr>
<tr>
<td>Mechanical Drawing, one year</td>
<td>Computer-Aided Design/Drafting 5</td>
</tr>
<tr>
<td>Language, two years in one</td>
<td>First semester language</td>
</tr>
</tbody>
</table>

Tutorial Services

The Learning Resources Center Tutorial Program located in the Library offers free drop-in tutoring for over 40 subjects. All tutoring is provided by highly trained, nationally certified tutors. Any registered El Camino College student can meet with a tutor on a drop-in basis. No reservations are required. Students may work with tutors individually or in small groups. Drop-in tutoring for some subjects may be available at other campus locations.

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.

Students may register for Distance Education courses during registration via www.elcamino.edu. For further information, stop in 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 a regular semester are Monday through Friday, 8:00 am. to 4:30 p.m. During the summer session, the office is closed on Fridays.

Study Abroad

The Study Abroad Program at El Camino College is designed to foster international and multi-cultural understanding and enrichment for students enrolled in an academic program abroad. Students who participate in the program will experience other cultures first-hand in the host country of study.

Courses offered abroad encourage growth and innovation in fine arts, foreign language, humanities, social sciences and other areas. The global perspective acquired through a study abroad program will help students enhance their educational perspective and assist them in better understanding the international cultural setting of California and the Pacific Rim.

The Study Abroad Program is committed to providing a strong academic foundation for students in foreign and overseas academic programs while nurturing multi-cultural awareness of interrelationships among the global community of the 21st Century.

Students who are eligible for Financial Aid may qualify for grants and/or loans to cover cost of study abroad fees.

Cooperative Work Experience Education

Cooperative Work Experience Education (CWEE) is a course designed for students who are cross-training at their current work-site for upward mobility or possible career changes, as well as those looking for entry-level occupational training through work-based 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 7 units [including CWEE]. Students not enrolled in 7 units should contact the appropriate Academic Affairs Division Office. For more information, please refer to page 103.

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 expression. Academic freedom is essential to these purposes and applies to both teaching and research. 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. Board Policy 4030 supersedes Board Policy 4030.1 Teaching of Controversial Issues adopted by the Board on July 26, 1965.

**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 being offered currently, refer to the Schedule of Classes which is published every spring, summer and fall. The Schedule of Classes is available free of charge before each semester in the Office of Admissions and Records. It is also available at area libraries and in high schools.

**Course Numbering**

Courses listed in this catalog are one semester courses. Those with an upper case letter after the number, such as English 1A-1B, are a sequence and are organized accordingly.

Lower case letters after the course number, such as Music 20abcd, 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. Spanish 1, 2, 3, and 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.

This requirement also applies to pre-collegiate basic skills prerequisites, which provide foundation skills in reading, writing and mathematics. Occasionally, students attempting to enroll in a pre-collegiate basic skills course will discover that all sections of that basic skills course have been filled. In these situations, students may petition to have the prerequisite course waived for that particular term. Guidelines and forms for requesting a waiver for a basic skills prerequisite are available in the Counseling Office.

**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 corequisite 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 advisor or the articulation officer.

Students planning to transfer to a college or university should consult the transfer curriculum guide sheets available in the Counseling Services Center, visit the Transfer Center, and view ASSIST.

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 advisor or the articulation officer.
Academic Strategies

Academic Strategies 1abcd
Individualized Academic Strategies
1 unit; 3 hours lab to be arranged
Credit, not degree applicable
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: Pass/no pass only

Academic Strategies 20ab
Prewriting Workshop
2 units; 2 hours lecture
Credit, not degree applicable
In this course students will learn strategies to break negative psychological barriers to writing and to increase their understanding and use of prewriting as an important first step in the composing process.
Note: Pass/no pass only

Academic Strategies 22ab
Vocabulary Building for College Students
2 units; 2 hours lecture
Credit, not degree applicable
This course is designed to increase the student’s reading, listening, writing, and speaking vocabularies 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

Academic Strategies 23ab
Spelling Techniques
2 units; 2 hours lecture
Credit, not degree applicable
This course is designed for adult learners to identify personal spelling errors and to provide practice using the appropriate rules of spelling necessary for college level writing.
Note: Pass/no pass only

Academic Strategies 25ab
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

Academic Strategies 30ab
Test-Taking Strategies
2 units; 2 hours lecture
Credit, not degree applicable
In this course, 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

Academic Strategies 31ab
Study Techniques
2 units; 2 hours lecture
Credit, not degree applicable
This course is designed to assist the student in acquiring competency in textbook study techniques and in developing an organized system of time and study management.
Note: Pass/no pass only

Academic Strategies 33ab
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

Academic Strategies 35ab
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

Academic Strategies 36ab
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

The hours per week of courses may be adjusted based on the length of the term.

Academic Strategies 40ab
Mathematics Anxiety Workshop
2 units; 2 hours lecture
Credit, not degree applicable
This course is designed to help students understand the origin of mathematics anxiety, and then provide opportunities, strategies, and techniques in overcoming the barriers that impede their success in mathematics courses.
Note: Pass/no pass only

Academic Strategies 50
Special Topics in Academic Strategies
Units determined by individual course; lecture/lab hours determined by individual course
Credit status determined by individual course
This course is designed to explore topics in Academic Strategies more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

Academic Strategies 60
Strategies for Success in Distance Education
1 unit; 1 hour lecture
Credit, not 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 e-mail, online class interactions such as discussion groups, World Wide Web access, equipment needs and differences between online and onsite courses will be covered.

Academic Strategies 100
Supervised Tutoring:
Academic Skills Development
0 units; 72 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 tutoring related to their classroom assignments. This tutoring course covers the application of learning skills, use of learning resources, and review of course content.
Note: This course is repeatable and open for enrollment at registration and at anytime during the semester.
Administration of Justice – A.S. Degree and Certificates of Achievement and Accomplishment

[Industry and Technology Division]

The administration of justice degree or certificate prepares students for a career in criminal justice. By completing the degree or certificate requirements, the student will 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. Competencies will be assessed regularly in accordance with the California Commission on Peace Officers Standards and Training (P.O.S.T.) criteria.

Administration of Justice 100 is required of all pre-employment Administration of Justice students pursuing an Associate of Science degree or seeking immediate employment. AJ 100 is not required of the employed officer or of the student enrolling in a specialized course within the 100-200 series. All students enrolled in this major should be aware of the physical requirements for employment in the law enforcement area.

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.

El Camino College Major Requirements

At least 50% of the major requirements for the Associate in Arts degree must be completed at El Camino College.

Administration of Justice 100, 103, 115, 130, 131, 135, 170; a minimum of six units from: Administration of Justice 70, 95/96abcd (2-4 units), 106, 107, 109, 111, 126, 132, 133, 134, 150, 155
Total Units: 27-32

Certificate of Achievement
A Certificate of Achievement will be granted upon completion of the courses listed below. At least 50% of the courses required for the Certificate of Achievement must be completed at El Camino College.

Administration of Justice:
Administration of Justice 100, 103, 115, 130, 131, 135, 170;
a minimum of six units from: Administration of Justice 70, 95/96abcd [2-4 units], 106, 107, 109, 111, 126, 132, 133, 134, 150, 155
Total Units: 27-32

Certificate of Accomplishment
A Certificate of Accomplishment will be granted upon completion of the courses listed below. At least 50% of the courses required for the Certificate of Accomplishment must be completed at El Camino College.

Security Officer:
Administration of Justice 70, 115, 135, 140, Computer Information Systems 13
Total Units: 14

Preparation for the 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.

*Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center advisor, or the articulation officer.
Administration of Justice 49  
**Laws of Arrest and Firearms - Penal Code 832**

3 units; 2.5 hours lecture, 1.5 hours lab to be arranged  
Recommended Preparation: eligibility for English 84  
Credit, degree applicable  
Transfer CSU

This class is designed to meet the minimum requirements for training as required by Penal Code Section 832 and certified by the California Commission on Peace Officer Standards and Training (P.O.S.T.). The course is certified by P.O.S.T. in the areas of laws of arrest and ethical use of force, arrest methods and control, and firearms training. The course has 45 hours of lecture covering the California laws of arrest and firearms, 9 hours of training in arrest methods and control, and 18 hours of training in the use of firearms for a total of 72 hours. The course will cover the basic fundamentals of the laws of arrest, arrest methods and controls, and the basic principles of firearms training which will enhance an individual’s ability to meet the state’s minimum requirements for employment in a law enforcement or allied agency.

Administration of Justice 50  
**Special Topics in Administration of Justice**

Units determined by individual course; lecture/lab hours determined by individual course  
Credit status determined by individual course

This course is designed to explore topics in Administration of Justice more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

Administration of Justice 60  
**Search Warrants**

0.5 unit; 9 hours lecture (one week course)  
Enrollment Limitation: Possession of a California Commission on Peace Officer Standards and Training (P.O.S.T.) Basic certificate or Level 1 or Level 2 Reserve certificate  
Credit, not degree applicable

This P.O.S.T certified course is designed to teach field personnel and new investigators how to write search warrants and how to complete telephone search warrants.  
Note: Pass/no pass only  
Note: This course is repeatable.

Administration of Justice 67  
**Continuing Professional Training**

0.5 - 2 units; 9-36 hours lecture (one week course)  
Enrollment Limitation: possession of a P.O.S.T. certificate  
Credit, not degree applicable

This course will acquaint law enforcement personnel with current changes in the field of law enforcement. The course content satisfies the Commission of Peace Officer Standards and Training (P.O.S.T.) continuing professional training requirements.  
Note: Pass/no pass only  
Note: This course is repeatable.

Administration of Justice 70  
**Introduction to Industrial Security**

3 units; 3 hours lecture  
Recommended Preparation: eligibility for English 84  
Credit, degree applicable  
Transfer CSU

In this course students are introduced to the philosophy and legal framework of industrial security operations. The course includes a survey of contemporary practices in areas such as administration, personnel, and physical security.

Administration of Justice 95/96abcd  
**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 - limitations apply

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: The total units earned for CWEE may not exceed 16 units.

Administration of Justice 99abc  
**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 - limitations apply

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 (60 hours per unit).  
Note: Refer to page 11 of this Catalog for eligibility requirements.

Administration of Justice 100  
**Introduction to Administration of Justice**

3 units; 3 hours lecture  
Recommended Preparation: eligibility for English 84  
Credit, degree applicable  
Transfer CSU, UC

This course is a study of the history and philosophy of administration of justice in America including a survey of law enforcement, the judiciary, and corrections. Topics include crime theory, role expectations, and their interrelationship, punishment and rehabilitation, ethics, education, and training.

Administration of Justice 103  
**Concepts of Criminal Law I**

3 units; 3 hours lecture  
Recommended Preparation: eligibility for English 84  
Credit, degree applicable  
Transfer CSU, UC*  
Special Study

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.

The hours per week of courses may be adjusted based on the length of the term.
Administration of Justice 106
Criminal Justice Recruitment and Selection
3 units; 3 hours lecture
Credit, degree applicable
Transfer CSU
This course presents an overview of the criminal justice recruitment and selection process, and provides opportunities to gain knowledge and skills that will enable them to be more successful at passing the various testing phases in a criminal justice testing and background investigation process. Instruction begins with the application phase, then addresses the various steps in the hiring process including: the written examination, oral interview, written and oral psychological exams, polygraph exam, physical agility test and background investigation.

Administration of Justice 107
Crime and Control - An Introduction to Corrections
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 84
Credit, degree applicable
Transfer CSU
This is a basic course covering crime, criminal behavior and social attempts at controlling that behavior. Emphasis in this course is placed on traditional types of punishment, as well as rehabilitation, probation, parole, and diversion. This course covers the basic career skills and knowledge required for employment.

Administration of Justice 109
Introduction to Police Patrol Procedures
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 84
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 and arrests, civil and domestic disturbances, and the handling of traffic related problems.

Administration of Justice 111
Criminal Investigation
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 84
Credit, degree applicable
Transfer CSU, UC
This course is an in-depth study of the fundamental 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.

Administration of Justice 115
Community and Human Relations
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 84
Credit, degree applicable
Transfer CSU
This course explores the roles of criminal justice practitioners and their agencies. Students examine the interrelationships and role expectations among the various agencies and the public. Principal emphasis is placed on the professional image the system of justice administration conveys, and the development of positive relationships between members of the system and the public.

Administration of Justice 126
Juvenile Delinquency and Legal Procedures
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 84
Credit, degree applicable
Transfer CSU
Topics covered in this study of juvenile delinquency and the juvenile justice system include theories of juvenile crime causation, gangs, juvenile law, and the handling of juvenile offenders as well as social, cultural and environmental factors. Current social services programs designed for delinquents, with emphasis on practical applications, probation and youth authority procedures, are also discussed.

Administration of Justice 130
Criminal Procedures
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 84
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.

Administration of Justice 131
Legal Aspects of Evidence
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 84
Credit, degree applicable
Transfer CSU, UC
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.

Administration of Justice 132
Crime Scene Investigation
3 units; 3 hours lecture
Recommended Preparation: Administration of Justice 100
Credit, degree applicable; Transfer CSU
This course provides students with the basic understanding of Crime Scene Investigation (CSI), the workings of a CSI unit and will present an overview of the relationship that exists between forensic science and law enforcement. The course includes a study of crime scene examination, crime scene documentation, DNA and trace evidence analysis, and evidence collection procedures. Students learn to prepare a case for prosecution and testify in court.

*Some UC transferable courses have credit limitations.
For details, see a counselor, the Transfer Center advisor, or the articulation officer.

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Administration of Justice 133
Fingerprint Classification and Investigation
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 84
Credit, degree applicable
Transfer CSU
This course covers the basic principles of fingerprints including lifting, classification, and identification. The history of fingerprints, Henry and Battley systems, and the legal aspects of fingerprints are studied in relation to current practices and procedures.

Administration of Justice 134
Introduction to Crime Analysis
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 84
Credit, degree applicable
Transfer CSU
This course is designed to acquaint the student with the techniques necessary 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.

Administration of Justice 135
Report Writing
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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 construct police report narratives, using proper spelling, grammar and sentence structure, and in a manner that satisfies typical requirements for a criminal investigation or prosecution.

Administration of Justice 136
Ethics in the Justice System
3 units; 3 hours lecture
Recommended Preparation: Administration of Justice 100
Credit, degree applicable
Transfer CSU
This course explores the development of personal and social values, the social role law enforcement faces, and the way the criminal justice system responds to such issues. Topics include individual and organizational value systems, group dynamics, integrity and character in leadership and law enforcement, the dynamics of power versus authority, the impact of ethical choices in the law enforcement environment, and the subsequent effect within the justice system.

Administration of Justice 140
Basic Security Officer Training
2 units; 2 hours lecture
Credit, not degree applicable
This course is a survey of contemporary industrial security including legal implications, standards of conduct, communications, emergency procedures, health and safety, internal and external protection, and record keeping.
Note: Pass/no pass only.

Administration of Justice 150
Peace Officer Training Module - Level III
8 units; 6 hours lecture, 6 hours lab
Enrollment Limitation: 1. Medical examination (for safety and college liability reasons); 2. Students must apply for and receive a California Department of Justice Firearms and Arrest Clearance (Penal Code 13511.5).
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 general law enforcement assignments under immediate supervision of a sworn officer. The student will participate in a 261 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 836.6.

Administration of Justice 155
Peace Officer Training - Level II Module
11 units; 9.5 hours lecture, 5 hours lab
Prerequisite: Administration of Justice 150 with a minimum grade of C or equivalent
Enrollment Limitation: 1. Current Penal Code 832, P.C. 832 certification valid within the last three years; 2. Current Cardio Pulmonary Resuscitation (C.P.R.) and First Aid certification; 3. Current Medical examination (valid within 6 months) [for safety and liability reasons]; 4. Current California Department of Justice Firearms and Arrest Clearance (Penal Code Section 13511.5) [valid within 6 months].
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 police officer training candidates. A Level II peace officer may perform general law enforcement assignments under immediate supervision of a sworn officer. The student will participate in a 261 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 836.6.

Administration of Justice 170
Laws of Arrest, Search and Seizure
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 84
Credit, degree applicable
Transfer CSU
In this course, students examine the history and development of the laws and customs of arrest, search and seizure, and the "Exclusionary Rule." Emphasis is given to the implication of these procedures as they relate to law enforcement officers and others in the apprehension of criminals and the procuring of evidence.

Administration of Justice 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 pre-employment 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.

The hours per week of courses may be adjusted based on the length of the term.
Air Conditioning and Refrigeration

Air Conditioning and Refrigeration 5

*Electrical Applications*
4 units; 3 hours lecture, 3 hours lab
Prerequisite: Air Conditioning and Refrigeration 21 or 22 with a minimum grade of C in prerequisite or equivalent
Credit, degree applicable
Transfer CSU

The course focuses on basic electrical theory and training in installing, servicing, trouble-shooting, and operating electrical control systems for air conditioning. Single phase and three phase air conditioning and refrigeration systems are covered in classroom discussions and laboratory assignments.

Air Conditioning and Refrigeration 6

*Refrigeration and Air Conditioning Control Systems*
4 units; 3 hours lecture; 3 hours lab
Prerequisite: Air Conditioning and Refrigeration 21 or 22 with a minimum grade of C in prerequisite 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. Theoretical problems and practical lab experience needed to diagnose electrical problems and safety to make the necessary repairs are emphasized. The course provides a foundation in the skills required to analyze and service basic circuits as well as complex analog control circuitry.

Air Conditioning and Refrigeration 20

*Solar Energy Applications-Photovoltaics and Solar Thermal*
3 hours lecture
Transfer CSU

This is an introductory course in solar thermal and Photovoltaics (PVs). Topics covered include solar components, passive solar systems, active solar systems, solar hot water and solar electricity. Students will learn solar history, how solar panels work, changing Direct Current (DC) voltage to Alternating Current (AC) voltage, applications of the National Electric Codes (NEC) codes and best solar locations and energy savings.

Air Conditioning and Refrigeration and A.S. Degree and Certificate of Achievement

(Industry and Technology Division)

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, and installation of residential, commercial, and industrial heating, air conditioning, and refrigeration systems. Students will learn to read wiring diagram, diagnose control circuits, operate test equipment, and service pneumatic 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, and air conditioning technician.

El Camino College Major Requirements
At least 50% of the major requirements for the Associate in Science Degree must be completed at El Camino College.

Air Conditioning and Refrigeration 5, 6, 20, 21, 22, 23, 25, 27, 30, 32, 34

Recommended electives: Technical Mathematics 1

Total Units: 39

Certificate of Achievement
A Certificate of Achievement will be granted upon completion of the courses listed below. At least 50% of the courses for the Certificate of Achievement must be completed at El Camino College.

Heating, Ventilation, and Air Conditioning (HVAC) and Refrigeration:
Air Conditioning and Refrigeration 5, 6, 20, 21, 22, 23, 25, 27, 30, 32, 34, Technical Mathematics 1

Total Units: 35-39

Air Conditioning and Refrigeration 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. Laboratory projects and exercises related to lectures and demonstrations will be assigned.

Air Conditioning and Refrigeration 22

*Basic Refrigeration*
4 units; 3 hours lecture, 3 hours lab
Credit, degree applicable
Transfer CSU

In this course students are provided basic instruction in refrigeration covering the principles and their application to domestic and commercial refrigeration systems. Soldering and brazing copper to copper and copper to steel with air-acetylene and oxygen-acetylene methods, use of hand tools, electric meters, and test equipment are included.

Air Conditioning and Refrigeration 23

*Commercial Refrigeration Applications*
4 units; 3 hours lecture, 3 hours lab
Prerequisite: Air Conditioning and Refrigeration 21 or 22 with a minimum grade of C in prerequisite 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.

The hours per week of courses may be adjusted based on the length of the term.
Air Conditioning and Refrigeration 25  
**Energy Efficient Residential, Commercial and Industrial Air Conditioning**  
4 units; 3 hours lecture, 3 hours lab  
Prerequisite: Air Conditioning and Refrigeration 21 or 22 with a minimum grade of C in prerequisite or equivalent  
Credit, degree applicable  
Transfer CSU  
This course covers energy efficient green technology, (high efficiency) and advanced residential, commercial and industrial air conditioning. Lab activities include: the use of air conditioning test equipment, installation, repair and maintenance of various types of air conditioning systems. Students will learn various techniques of troubleshooting electrical and mechanical problems.

Air Conditioning and Refrigeration 27  
**Heating Technologies**  
4 units; 3 hours lecture, 3 hours lab  
Prerequisite: Air Conditioning and Refrigeration 21 or 22 with a minimum grade of C in prerequisite or equivalent  
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.

Air Conditioning and Refrigeration 30  
**Electric Controls**  
2 units; 2 hours lecture  
Prerequisite: Air Conditioning and Refrigeration 21 or 22 with a minimum grade of C or equivalent  
Credit, degree applicable  
Transfer CSU  
This course covers the study of electrical components and circuitry for air conditioning and refrigeration controls. Theoretical principles are applied to diagnose electrical problems and safely make necessary repairs to Heating, Ventilating and Air Conditioning (HVAC) systems.

Air Conditioning and Refrigeration 32  
**Fundamentals of Pneumatic Controls**  
2 units; 2 hours lecture  
Prerequisite: Air Conditioning and Refrigeration 21 or 22 with a minimum grade of C or equivalent  
Credit, degree applicable  
Transfer CSU  
This course covers the study of the basic fundamentals of pneumatic control for heating, ventilating and air conditioning systems. Students learn how to install, calibrate, and maintain control systems.

Air Conditioning and Refrigeration 34  
**HVAC Customer Service**  
1 unit; 1 hour lecture  
Credit, degree applicable  
Transfer CSU  
This is a course in heating, ventilation, and air conditioning (HVAC) customer service. Topics covered include communication skills, problem solving, and quality service attitude. Students will learn vital workplace skills through designed exercises as well as how employers evaluate these skills in their employees.

Air Conditioning and Refrigeration 50  
**Special Topics in Air Conditioning and Refrigeration**  
Units determined by individual course; lecture/lab hours determined by individual course  
Credit status determined by individual course  
This course is designed to explore topics in Air Conditioning and Refrigeration more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

Air Conditioning and Refrigeration 95abcd  
**Cooperative Work Experience Education**  
3-4 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 - limitations apply  
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: The total units earned for CWEE may not exceed 16 units.

Air Conditioning and Refrigeration 99abc  
**Independent Study**  
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 - limitations apply  
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 (60 hours per unit).  
Note: Refer to page 11 of this Catalog for eligibility requirements.
American Studies

Anatomy

Anatomy 30
Essentials of Anatomy and Physiology
4 units; 2 hours lecture, 6 hours lab
Recommended Preparation: English 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.

Anatomy 32
General Human Anatomy
4 units; 2 hours lecture, 6 hours lab
Recommended Preparation: Anatomy 30 or Biology 10 or Biology 1A; English 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.

Anatomy and Physiology 34A
Anatomy and Physiology I
4 units; 3 hours lecture, 5 hours lab
Prerequisite: Chemistry 4, Chemistry 20, or Chemistry 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 in-depth 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.

Anatomy and Physiology 34B
Anatomy and Physiology II
4 units; 3 hours lecture, 5 hours lab
Prerequisite: Anatomy and Physiology 34A
Credit, degree applicable
Transfer CSU, UC

This is the second semester of the two-semester Anatomy and Physiology lecture and lab course. Topics examined 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.

Anthropology

Anthropology 1
Introduction to Physical Anthropology
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 1A
Credit, degree applicable
Transfer CSU, UC

This course explores and emphasizes the evolution and physical diversity of the human species. Topics include genetics, mechanisms of evolutionary change, human variation, and the reconstruction of human evolutionary history through examination of the fossil record and comparative studies of the living non-human primates.

Anthropology 2
Introduction to Cultural Anthropology
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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; and religious systems along with the effects of cultural change, mainly as the result of European expansion, industrialization, and globalization.
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.

El Camino College Major Requirements
Anthropology 1, 2, 3, 4;
three courses from: Anthropology 5, 6, 7, 8, 9, 10, 11, 12, 20A, Geography 5
Total Units: 19-21

Preparation for the 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 3
Introduction to Archaeology
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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.

Anthropology 4
Language and Culture
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 1A
Credit, degree applicable
Transfer CSU, UC
This course introduces students to the anthropological study of language and nonverbal human communication. Using a cross-cultural perspective, students will examine the relationship between culture and the ways in which humans communicate. Topics include language structure, acquisition, diversity, and change.

Anthropology 5
Physical Anthropology Laboratory
1 unit; 3 hours lab
Prerequisite: Anthropology 1 with a minimum grade of C or concurrent enrollment
Credit, degree applicable
Transfer CSU, UC
This course uses laboratory exercises and other assignments 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.

Anthropology 6
Native Peoples of North America
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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.

Anthropology 7
Native Peoples of South America
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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.

Anthropology 8
Ancient Civilizations of the Mesoamerica
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 1A
Credit, degree applicable
Transfer CSU, UC
This course traces the development of the indigenous societies of Mesoamerica from the entry of humans into the Americas at the end of the Upper Paleolithic Period until the arrival and conquest by 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 languages, writing systems, belief systems, political systems, economies, and the art of these peoples.

Anthropology 9
Women, Culture, and Society
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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.
Anthropology 10  
**Medical Anthropology**
3 units; 3 hours lecture  
Recommended Preparation: English 1A  
Credit, degree applicable  
Transfer CSU, UC  
This course is a cross-cultural survey of healing systems in traditional as well as modern societies. Emphasis will be placed on understanding culture specific perceptions of disease. Topics include healers and healing roles, perceptions of the body, the role of power in the organization of medical institutions, and applied medical anthropology.

Anthropology 11  
**Anthropology of Magic, Religion, and Witchcraft**
3 units; 3 hours lecture  
Recommended Preparation: eligibility for English 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.

Anthropology 12  
**Ancient Civilizations of the World**
3 units; 3 hours lecture  
Recommended Preparation: eligibility for English 1A  
Credit, degree applicable  
Transfer CSU  
This course traces the emergence of early states and ancient empires around the globe. The cultural achievements linked to state development are traced through a survey of evidence from both the archaeological and historical records. Students will be introduced to anthropological theories that seek to model and explain the appearance of state-level societies and empires.

Anthropology 20A  
**Introduction to Museum Studies**
3 units; 2 hours lecture, 1 hour lab plus 2 hours to be arranged  
Recommended Preparation: Anthropology 2  
Credit, degree applicable  
Transfer CSU  
This course examines careers in museums, including curation, conservation, registration, the design of exhibits, collections management, and educational programs. Participants in the course will plan, design and install an exhibit in the Anthropology Museum involving two- and three-dimensional artifacts, and participate in all aspects of museum curation.  
Note: No background in Anthropology is required.

Anthropology 50  
**Special Topics in Anthropology**
Units determined by individual course; lecture/lab hours determined by individual course  
Credit status determined by individual course  
This course is designed to explore topics in Anthropology more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

Anthropology 96abcd  
**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-limitations apply  
Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Anthropology 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 CWEE may not exceed 16 units.

Anthropology 99abc  
**Independent Study**
1-3 units; hours to be arranged  
Enrollment Limitation: two courses in Anthropology with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work  
Credit, degree applicable  
Transfer CSU, UC - limitations apply  
This course provides advanced studies in a subject field of Anthropology not covered in the regular departmental offerings. Regular conferences will be held with the instructor to discuss and coordinate the assigned projects [60 hours per unit].  
Note: Refer to page 11 of this Catalog for eligibility requirements.

Architecture 50  
**Special Topics in Architecture**
Units determined by individual course; lecture/lab hours determined by individual course  
Credit status determined by individual course  
This course is designed to explore topics in Architecture more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

Architecture 96abcd  
**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 - limitations apply  
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: The total units earned for CWEE may not exceed 16 units.

*Some UC transferable courses have credit limitations.  
For details, see a counselor, the Transfer Center advisor, or the articulation officer.
Architecture 99abc
**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 - limitations apply

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 (60 hours per unit).

*Note: Refer to page 11 of this Catalog for eligibility requirements.*

Architecture 100
**An Orientation to Architecture**

1 unit; 1 hour lecture

Recommended Preparation: eligibility for English 84

Credit, degree applicable

Transfer CSU

This course is an orientation to architecture for the beginning student. The student will learn how architecture is created and understood as well as how it shapes the social and urban environment. Opportunities for further education and career options will be discussed.

Architecture 104
**History of Western Architecture**

3 units; 3 hours lecture

Recommended Preparation: eligibility for English 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.

Architecture 120abcd
**Computer Aided Architectural Drafting**

3 units; 2 hours lecture, 4 hours lab

Prerequisite: Architecture 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.

Architecture 121abcd
**Three-Dimensional Architectural Computer Aided Design**

3 units; 2 hours lecture, 4 hours lab

Prerequisite: one semester of Architecture 120abcd with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

This is a course in three-dimensional (3-D) computer aided design (CAD) using various CAD software including AutoCAD and Revit. Students will create detailed three dimensional computer models of buildings, generating floor plans, building sections, elevations, details and schedules, as well as computer animations and renderings of 3-D models. Students will use Building Information Modeling (BIM) in design, analysis and documentation of their buildings.

The hours per week of courses may be adjusted based on the length of the term.
Architecture 125abcd
Advanced Three-Dimensional Architectural Computer Aided Design
3 units; 2 hours lecture, 4 hours lab
Prerequisite: Architecture 121abcd with a minimum grade of C or equivalent
Credit, degree applicable
Transfer CSU
This advanced course in three-dimensional (3D) computer aided design for architecture uses various CAD software, including Revit Architecture, to teach Building Information Modeling (BIM) techniques. Topics will 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.

Architecture 150A
Architectural Drafting I
3 units; 2 hours lecture, 4 hours lab to be arranged
Credit, degree applicable
Transfer CSU
This course is an introduction to architectural drafting. Line, lettering, sketching, and drawing techniques will be developed. Building codes and zoning codes will be introduced along with the functions of framing members in wood frame construction (Type V). Manual drafting techniques will be used to develop a set of construction documents with an introduction to AutoCAD.

Architecture 150B
Architectural Drafting II
3 units; 2 hours lecture, 4 hours lab to be arranged
Prerequisite: Architecture 150A with a minimum grade of C or equivalent
Recommended Preparation: concurrent enrollment in one semester of Architecture 120abcd
Credit, degree applicable
Transfer CSU
This is an advanced level drafting class covering residential buildings. The student will develop working drawings for a two story residence on a low sloping site. Instruction will stress the construction process, structural detailing and uniform building code requirements for residential Type V construction.

Architecture 158
Structures Analysis - Timber
3 units; 3 hours lecture
Recommended Preparation: eligibility for English A
Credit, degree applicable
Transfer CSU
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.

Architecture 170
Architectural Graphic Techniques
3 units; 2 hours lecture, 4 hours lab to be arranged
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.

Architecture 171
Architectural Three-Dimensional Illustration
3 units; 2 hours lecture, 4 hours lab to be arranged
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.

Architecture 172
Architectural Color Rendering Techniques
3 units; 2 hours lecture, 4 hours lab to be arranged
Credit, degree applicable
Transfer CSU
This course is the study of rendering techniques used by illustrator to delineate architectural drawings. The course is taught using various color mediums.

Architecture 180abcd
(formerly Architecture 180)
Design/Build Studio
4 units; 2 hours lecture, 6 hours lab
Prerequisite: Architecture 150A or Construction Technology 110 with a minimum grade of C in prerequisite or equivalent
Credit, degree applicable
Transfer CSU, UC
This course introduces the architectural student 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. Scheduling, budgeting and financing of construction projects will also be covered.

Architecture 199ab
Architectural Design Studio
4 units; 2 hours lecture, 6 hours lab to be arranged
Prerequisite: Architecture 150B, 170 and 171 with a minimum grade of C in prerequisite
Credit, degree applicable
Transfer CSU, UC*
This course introduces the advanced students to the factors that architects observe when formulating the solution to a problem. Students will design and compose two and three dimensional drawings as well as build models to demonstrate their solutions.

Art

Art 1
Art and Visual Culture in Modern Life
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 1A
Credit, degree applicable
Transfer CSU, UC
This course is a global survey of art and visual culture from different historical periods. Students acquire analytical and interpretive skills and develop a basic understanding of the role of art and visual culture in human history.

*Note: The maximum UC credit allowed is four units.
Art – A.A. Degree and Certificates of Achievement

[Fine Arts Division]

The degree or certificates provide 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 qualify to pursue a variety of art-related careers and advanced degree options.

El Camino College Major Requirements

Art – Art History Option: Art 10ab, 31abcd, 37ab (Only one semester of a course will be credited toward the major requirements.); 15 units from: Art 2, 3, 4, 5A, 5B, 6, 7, 9, 34ab (only one semester of), 108; 2-3 units from: Art 11abcd, 17ab, 18abcd, 19ab, 20abcd, 22ab, 23abcd, 29ab, 38abcd, 39ab, 40abcd, 41ab, 42abcd, 52abcd, 53ab, 54abcd, 61ab, 62abcd, 63abcd, 73ab, 74abcd, 75abcd, 81ab, 82abcd, 83abcd, 87ab, 88abcd, 89abcd, 141abcd, 142abcd, 143abcd, 144abcd, 145abcd, 146abcd, 147abcd, 151ab, Photography 51 (Only one semester of a course will be credited toward the major requirements.)

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

Total Units: 26-28

Art – Studio Art Option: Art 10ab, 31abcd, 37ab, (Only one semester of a course will be credited toward the major requirements.); 6 units from: Art 2, 3, 4, 5A, 5B, 6, 7, 9, 108; 12 units from: Art 11abcd, 17ab, 18abcd, 19ab, 20abcd, 22ab, 23abcd, 24ab, 25abcd, 29ab, 34ab, 38abcd, 39ab, 40abcd, 41ab, 42abcd, 52abcd, 53ab, 54abcd, 61ab, 62abcd, 63abcd, 73ab, 74abcd, 75abcd, 81ab, 82abcd, 83abcd, 87ab, 88abcd, 89abcd, 141abcd, 142abcd, 143abcd, 144abcd, 145abcd, 146abcd, 147abcd, 151ab, Photography 51 (Only one semester of a course will be credited toward the major requirements.)

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 11abcd, 19ab, 20abcd, 22ab, 23abcd, 24ab, 25abcd, 17ab, 18abcd

Printmaking: Art 87ab, 88abcd, 89abcd

Ceramics: Art 61ab, 62abcd, 63abcd

Sculpture: Art 81ab, 82abcd, 83abcd

Jewelry/Metalsmithing: Art 73ab, 74abcd, 75abcd

Design: Art 29ab, 35ab, 36abcd, 141abcd, 142abcd, 143abcd, 144abcd, 145abcd

Graphic Design: Art 29ab, 39ab, 40abcd, 41ab, 42abcd, 44abcd, 52abcd, 53ab, 54abcd, 141abcd, 142abcd, 143abcd, 144abcd, 145abcd, 146abcd, 147abcd

Computer Animation: Art 10ab, 17ab, 141abcd, 142abcd, 144abcd, 147abcd

Digital Illustration: Art 10ab, 37ab, 53ab, 54abcd, 141abcd, 142abcd

Digital Photography: Art 10ab or 37ab; Photography 51, 1, 2 or 23A; Art 141abcd, 142abcd

Graphic Design for Print Publishing: Art 37ab, 39ab, 41ab, 141abcd, 142abcd, 143abcd

Motion Graphics/Visual Effects: Art 37ab, 141abcd, 142abcd, 144abcd, 147abcd

Television and Media Communications 11

Web Design: Art 37ab, 39ab, 141abcd, 142abcd, 145abcd, 146abcd

(Art 2 continued on next page)
Art 5A

History of Asian Art - India and Southeast Asia
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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.

Art 5B

History of Asian Art - China, Korea and Japan
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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.

Art 6

Cross-Cultural Art
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 1A
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. Attendance may be required at selected events presented by El Camino College Center for the Arts and/or art exhibitions presented in the El Camino College Art Gallery or in the community.

Certificate of Achievement – Digital Arts

A Certificate of Achievement will be issued to students completing the required courses in one of these options: Computer Animation, Digital Photography, Graphic Design, Illustration, Motion Graphics, or Web Design. A minimum of 12 units required for the Certificate of Achievement must be completed at El Camino College.

Computer Animation: Art 10ab, 37ab, 41ab, 141abcd, 142abcd, 144abcd, 145abcd, 147abcd, 195ab; one course from: Art 150 or Photography 51; two units from: Art 96abcd or 99abc; two courses from: Art 17ab, 31abcd, 82abcd, 146abcd
Total Units: 36-37

Digital Photography: Art 10ab, 37ab, 41ab, 141abcd, 142abcd, 195ab, Photography 1, 2, 23A, 51; two units from Art 99abc; two courses from: Art 143abcd, 144abcd, 146abcd, 147abcd, Photography 3, 4
Total Units: 38-39

Graphic Design: Art 10ab, 37ab, 39ab, 40abcd, 41ab, 141abcd, 142abcd, 143abcd, 146abcd, 195ab; one course from Art 150 or Photography 51; two units from: Art 96abcd or 99abc; one course from: Art 29 or 87ab
Total Units: 36-37

Illustration: Art 10ab, 17ab, 37ab, 41ab, 52abcd, 53ab, 54abcd, 141abcd, 142abcd, 195ab; one course from Art 150 or Photography 51; two units from: Art 96abcd or 99abc; one course from: Art 19ab, 22ab, 87ab
Total Units: 36-37

Motion Graphics: Art 10ab, 37ab, 41ab, 141abcd, 142abcd, 144abcd, 145abcd, 147abcd, 195ab; one course from Art 150 or Photography 51; two units from: Art 96abcd or 99abc; two courses from: Art 146abcd, Film/Video 20, 22, 28ab
Total Units: 36-37

Web Design: Art 10ab, 37ab, 39ab, 41ab, 141abcd, 142abcd, 145abcd, 146abcd, 195ab; one course from: Art 150 or Photography 51; two units from: Art 96abcd or 99abc; two courses from: Art 144abcd, 147abcd, Computer Information Systems 133
Total Units: 36-37

Certificate of Achievement – Gallery Management

A Certificate of Achievement will be granted to the student completing the courses listed below. At least 50% of the units for the certificate must be completed at El Camino College.

Art 29ab, 31abcd, 37ab, 141abcd, (Only one semester of a course will be credited toward the certificate requirement.); two semesters of Art 34ab; six units from: Art 1, 2, 3, 4, 5A, 5B, 6, 7, 9, 108
Total Units: 26

Certificate of Achievement – Jewelry Design and Fabrication

A Certificate of Achievement will be granted to the student completing the courses listed below. At least 50% of the units for the certificate must be completed at El Camino College.

Art 1, 10ab, 37ab, 73ab, 74abcd, 75abcd (Only one semester of a course will be credited toward the certificate.); Business 24
Total Units: 21

Preparation for the 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 11abcd
Drawing Fundamentals II
3 units; 2 hours lecture, 4 hours lab
Prerequisite: one semester of Art 10ab with a minimum grade of C or equivalent
Credit, degree applicable
Transfer CSU, UC
This course provides intermediate instruction in drawing with emphasis on media development, pictorial space, composition, interpretation, and improvisation.

Art 12ab
Perspective Drawing
1 unit; 0.5 hour lecture, 1.5 hours lab
Credit, not degree applicable
In this course students explore the practical application of the principles and techniques of perspective drawing. Students will be provided the opportunity to upgrade their current drawing skills, prepare for future study in studio art, and enhance their ability to develop portfolio quality artwork.

Art 13
Fundamentals of Painting II
3 units; 2 hours lecture, 4 hours lab
Prerequisite: one semester of Art 12ab with a minimum grade of C
Credit, degree applicable
Transfer CSU, UC
This course covers the art and technique of painting from live models with an emphasis on anatomical structure, representation of gestures, foreshortening and proportion.

Art 14
Life Drawing II
3 units; 2 hours lecture, 4 hours lab
Prerequisite: one semester of Art 13 with a minimum grade of C
Credit, degree applicable
Transfer CSU, UC
This course is a continuation of Art 13. Advanced problems in representing the human form are covered, with an increased emphasis on research and innovation.

*Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center advisor, or the articulation officer.
Art 25abcd  
**Life Painting II**  
3 units; 2 hours lecture, 4 hours lab  
Prerequisite: one semester of Art 24ab 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.

Art 29ab  
**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.

Art 31abcd  
**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.

Art 34ab  
**Gallery Management and Artist Career Issues**  
4 units; 3 hours lecture, 4 hours lab per week to be arranged  
Recommended Preparation: eligibility for English 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.

Art 37ab  
**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.

Art 38abcd  
**Two-Dimensional Design II**  
3 units; 2 hours lecture, 4 hours lab  
Prerequisite: one semester of Art 37ab 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.

Art 39ab  
**Advertising Design I**  
3 units; 2 hours lecture, 4 hours lab  
Credit, degree applicable  
Transfer CSU  
This course presents an overview of advertising 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.

Art 40abcd  
**Advertising Design II**  
3 units; 2 hours lecture, 4 hours lab  
Prerequisite: one semester of Art 39ab 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.

Art 41ab  
**Lettering and Typography I**  
3 units; 2 hours lecture, 4 hours lab  
Credit, degree applicable  
Transfer CSU  
This course provides a foundation in typography for students interested in graphic design and digital arts. Lettering techniques from calligraphy to digital typesetting will be covered. The use of type in printed publications, advertising, Web design, and motion graphics will be explored. Students will create typographic designs for both page and screen layout.
Art 52abcd
*Rendering*

3 units; 2 hours lecture, 4 hours lab
Prerequisite: one semester of Art 10ab with a minimum grade of C or equivalent
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.

Art 53abcd
*Illustration I*

3 units; 2 hours lecture, 4 hours lab
Prerequisite: one semester of Art 53ab with a minimum grade of C or equivalent
Recommended Preparation: Art 52abcd
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.

Art 54abcd
*Illustration II*

3 units; 2 hours lecture, 4 hours lab
Prerequisite: one semester of Art 53ab 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.

Art 61abcd
*Beginning Ceramics*

3 units; 2 hours lecture, 4 hours lab
Prerequisite: one semester of Art 10ab with a minimum grade of C
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.

Art 62abcd
*Intermediate Ceramics*

3 units; 2 hours lecture, 4 hours lab
Prerequisite: one semester of Art 61ab 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.

Art 63abcd
*Advanced Ceramics*

3 units; 2 hours lecture, 4 hours lab
Prerequisite: one semester of Art 62abcd 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.

Art 71abcd
*Beginning Metalsmithing*

3 units; 2 hours lecture, 4 hours lab
Prerequisite: one semester of Art 17ab with a minimum grade of C
Credit, degree applicable
Transfer CSU, UC

This course is an introduction to the technical and practical processes of jewelry and metalsmithing. Emphasis is placed on the development of original concepts, the refinement of techniques and production methods, and the development and presentation of portfolio-quality art work.

Art 72abcd
*Intermediate Metalsmithing*

3 units; 2 hours lecture, 4 hours lab
Prerequisite: one semester of Art 71abcd with a minimum grade of C
Credit, degree applicable
Transfer CSU, UC

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.

Art 73abcd
*Advanced Metalsmithing*

3 units; 2 hours lecture, 4 hours lab
Prerequisite: one semester of Art 72abcd with a minimum grade of C
Credit, degree applicable
Transfer CSU

In this course, students will develop design skills and concepts through metalworking and tool making.

Art 74abcd
*Jewelry Fabrication*

3 units; 2 hours lecture, 4 hours lab
Prerequisite: one semester of Art 73ab 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.

Art 75abcd
*Jewelry Casting*

3 units; 2 hours lecture, 4 hours lab
Prerequisite: one semester of Art 73ab 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.

Art 76abcd
*Beginning Sculpture*

3 units; 2 hours lecture, 4 hours lab
Prerequisite: one semester of Art 10ab with a minimum grade of C
Credit, degree applicable
Transfer CSU, UC

This course is an introduction to the techniques, materials, and concepts of sculpture. Emphasis is placed on the development of original concepts, the refinement of techniques and production methods, and the development and presentation of portfolio-quality art work.

Art 77abcd
*Intermediate Sculpture*

3 units; 2 hours lecture, 4 hours lab
Prerequisite: one semester of Art 76abcd with a minimum grade of C
Credit, degree applicable
Transfer CSU

In this course, students will explore 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.

*Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center advisor, or the articulation officer.*
Art 83abcd
Bronze Casting
3 units; 2 hours lecture, 4 hours lab
Prerequisite: one semester of Art 81ab with a minimum grade of C or one semester of Art 87ab with a minimum grade of C
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.

Art 87ab
Beginning Printmaking
3 units; 2 hours lecture, 4 hours lab
Prerequisite: one semester of Art 10ab with a minimum grade of C
Credit, degree applicable
Transfer CSU, UC
This course is a survey of the fundamental processes of printmaking. Instruction includes relief [woodcut and linoleum], intaglio [drypoint and etching], and serigraph [silkscreen] methods of printmaking. This course also includes lithography, printing in black and white and in color, as well as limited edition printing by hand and by press.

Art 88abcd
Etching/Relief
3 units; 2 hours lecture, 4 hours lab
Prerequisite: one semester of Art 87ab with a minimum grade of C
Credit, degree applicable
Transfer CSU, UC
This course is a continuation of Intaglio and Relief printing processes and includes potentials of various plate development techniques. The student will be introduced to multicolor prints involving the use of relief, multiple plates, collagraphs and viscosity printing methods.

Art 89abcd
Silkscreen/Lithography
3 units; 2 hours lecture, 4 hours lab
Prerequisite: one semester of Art 87ab with a minimum grade of C
Credit, degree applicable
Transfer CSU, UC
This course is a continuation of Silkscreen and Lithographic printing processes. Emphasis is placed on resist, photographic, multi-technical and multi-color techniques.

Art 96abcd
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 - limitations apply
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: The total units earned for CWEE may not exceed 16 units.

Art 99abc
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, UC: limitations apply
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 [60 hours per unit].
Note: Refer to page 11 of this Catalog for eligibility requirements.

Art 108
History of American Art
3 units; 3 hours lecture
Prerequisite: one semester of Art 10ab or Art 37ab with a minimum grade of C. Eligibility for English 1A
Credit, degree applicable
Transfer CSU, UC
In this international survey of contemporary art, students study recent works by artists from different geographic regions of the world. Emphasis is placed on artworks that reflect changes to world cultures resulting from 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 109
Contemporary Art in World Cultures
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 1A
Credit, degree applicable
Transfer CSU, UC
In this international survey of contemporary art, students study recent works by artists from different geographic regions of the world. Emphasis is placed on artworks that reflect changes to world cultures resulting from 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 141abcd
Digital Art
3 units; 2 hours lecture, 4 hours lab
Recommended Preparation: one semester of Art 10ab or Art 37ab with a minimum grade of C; eligibility for English 84; working knowledge of the computer and operating system
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], with a focus on the principles of two-dimensional design. Students will work on a variety of digital projects involving drawing, design, typogra-
pophy, and photographic manipulation.

Art 142abcd
Digital Photography
3 units; 2 hour lecture, 4 hours lab
Prerequisite: one semester of Art 141abcd or Art 151ab with a minimum grade of C in prerequisite
Recommended Preparation: Art 150 or Photography 51
Credit, degree applicable
Transfer CSU, UC
*Note: The maximum UC credit allowed for students completing Art 142abcd is three units.
Art 143abcd  
*Digital Design and Publishing*  
3 units; 2 hours lecture, 4 hours lab  
Prerequisite: one semester of Art 141abcd with a minimum grade of C or equivalent experience  
Recommended Preparation: Art 41ab  
Credit, degree applicable  
Transfer CSU  

This course is an introduction to three-dimensional animation concepts and skills using the computer. Students will receive hands-on experience with three-dimensional animation software and will create animations for visual effects, computer games, or short animation projects.

Art 144abcd  
*Three-Dimensional Computer Animation*  
3 units; 2 hours lecture, 4 hours lab  
Prerequisite: one semester of Art 141abcd with a minimum grade of C or equivalent experience  
Recommended Preparation: Art 10ab  
Credit, degree applicable  
Transfer CSU  

This course is an introduction to three-dimensional animation concepts and skills using the computer. Students will receive hands-on experience with three-dimensional animation software and will create animations for visual effects, computer games, or short animation projects.

Art 145abcd  
*Multimedia Design*  
3 units; 2 hours lecture, 4 hours lab  
Prerequisite: one semester of Art 141abcd with a minimum grade of C or equivalent experience  
Recommended Preparation: Art 142abcd or Art 144abcd  
Credit, degree applicable  
Transfer CSU, UC  

This course is designed to enable the student to create two-dimensional animation and interactive multimedia for the World Wide Web. Exercises lead students through screen and interface design, principles of animation, typography, digital imaging, digital sound, and digital video.

*Art 146abcd  
*Designing for the World Wide Web*  
3 units; 2 hours lecture, 4 hours lab  
Prerequisite: one semester of Art 141abcd with a minimum grade of C or equivalent experience  
Recommended Preparation: Art 142abcd and either Art 39abcd or Art 143abcd  
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 topography, images, and layout, organizing content, and designing an effective interface. Technical issues such as file formats, compression, testing, and debugging will also be covered.

*Art 147abcd  
*Motion Graphics*  
3 units; 2 hours lecture, 4 hours lab  
Prerequisite: one semester of Art 141abcd with a minimum grade of C or equivalent experience  
Recommended Preparation: Art 142abcd  
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.

*Art 150  
*The Art of Photography*  
3 units; 3 hours lecture  
Recommended Preparation: eligibility for English 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 Photography 150. Course credit is limited to Art 150 or Photography 150.

*Art 151ab  
The Art of Photography Digital Laboratory*  
1 unit; 3 hours lab  
Prerequisite: Art 150 or Photography 51 or Film/Video 22 with a minimum grade of C in prerequisite or concurrent enrollment  
Credit, degree applicable  
Transfer CSU  

This course introduces the computer as a tool for manipulating photographic images. Topics include digital image input, scanning, and various types of digital output. Emphasis is placed on the artistic possibilities of the image.

Note: Art 151ab is the same course as Photography 151ab. Credit is limited to Art 151ab or Photography 151ab.

*Art 154abcd  
*Digital Design and Publishing*  
3 units; 2 hours lecture, 4 hours lab  
Prerequisite: one semester of Art 141abcd with a minimum grade of C or equivalent experience  
Recommended Preparation: Art 41ab  
Credit, degree applicable  
Transfer CSU  

This course is an introduction to the use of the computer in producing visuals and designs for print media. Emphasis is placed on multi-page publications such as brochures, books, and magazines. Areas covered include hands-on experience with desktop publishing software, color, file management, integrating type and images, and printing techniques.

*Art 155abcd  
*Digital Design and Publishing*  
3 units; 2 hours lecture, 4 hours lab  
Prerequisite: one semester of Art 141abcd with a minimum grade of C or equivalent experience  
Recommended Preparation: Art 41ab  
Credit, degree applicable  
Transfer CSU  

This course is an introduction to the use of the computer in producing visuals and designs for print media. Emphasis is placed on multi-page publications such as brochures, books, and magazines. Areas covered include hands-on experience with desktop publishing software, color, file management, integrating type and images, and printing techniques.

*Art 156abcd  
*Digital Design and Publishing*  
3 units; 2 hours lecture, 4 hours lab  
Prerequisite: one semester of Art 141abcd with a minimum grade of C or equivalent experience  
Recommended Preparation: Art 41ab  
Credit, degree applicable  
Transfer CSU  

This course is an introduction to the use of the computer in producing visuals and designs for print media. Emphasis is placed on multi-page publications such as brochures, books, and magazines. Areas covered include hands-on experience with desktop publishing software, color, file management, integrating type and images, and printing techniques.

Art 157abcd  
*Motion Graphics*  
3 units; 2 hours lecture, 4 hours lab  
Prerequisite: one semester of Art 141abcd with a minimum grade of C or equivalent experience  
Recommended Preparation: Art 142abcd  
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.

Art 158abcd  
*The Art of Photography*  
3 units; 3 hours lecture  
Recommended Preparation: eligibility for English 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 Photography 150. Course credit is limited to Art 150 or Photography 150.

*Art 159abcd  
*Film/Video 22*  
3 units; 2 hours lecture  
Prerequisite: Art 150 or Photography 51 or Film/Video 22 with a minimum grade of C in prerequisite or concurrent enrollment  
Credit, degree applicable  
Transfer CSU  

This course analyzes various sectors of the art and design industry and provides instruction in portfolio planning and resume preparation for specific career areas. Management skills for independent freelance projects will also be covered.

Astronomy 12  
*Astronomy Laboratory*  
1 unit; 3 hours lab  
Prerequisite: Astronomy 20 or 25 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 Astronomy 20 or 25.

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*Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center advisor, or the articulation officer.*
### Astronomy – A.S. Degree

**Natural Sciences Division**

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 Transfer Major**

For information on specific university major requirements, please obtain a transfer major requirements guide sheet from 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.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
<th>Type</th>
<th>Credit, degree applicable</th>
<th>Transfer CSU, UC</th>
<th>Note:</th>
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<tbody>
<tr>
<td>Astronomy 13abc</td>
<td>Astronomical Optics</td>
<td>1</td>
<td>3 lab</td>
<td>Credit, degree applicable</td>
<td>Transfer CSU</td>
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<tr>
<td>Astronomy 20</td>
<td>The Solar System</td>
<td>3</td>
<td>3 lecture</td>
<td>Credit, degree applicable</td>
<td>Transfer CSU, UC</td>
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<tr>
<td>Astronomy 25</td>
<td>Stars and Galaxies</td>
<td>3</td>
<td>3 lecture</td>
<td>Credit, degree applicable</td>
<td>Transfer CSU, UC</td>
<td></td>
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<tr>
<td>Astronomy 50</td>
<td>Special Topics in Astronomy</td>
<td></td>
<td></td>
<td>Credit status determined by individual course</td>
<td>Transfer CSU, UC</td>
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</tr>
</tbody>
</table>

#### Astronomy 25

**Stars and Galaxies**

This course is an introduction to the universe and its history, from the Big Bang to the emergence of intelligent life on Earth. The course covers the sun, its life history, and its influence on the Earth. The formation, evolution, and fates of different kinds of stars are examined. An overview of the Milky Way Galaxy is presented, leading to a discussion of galaxy types, their clustering and evolution. The course concludes with an examination of cosmology, the study of the birth, structure, and evolution of the universe as a whole. Included is a discussion of the possibility of and the search for extraterrestrial life.

#### Astronomy 50

**Special Topics in Astronomy**

This course is designed to explore topics in astronomy more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

Astronomy 99abc

**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, UC - limitations apply

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 [60 hours per unit].

Note: Refer to page 11 of this Catalog for eligibility requirements.

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### Automotive Collision Repair/Painting

**Automotive Collision Repair/Painting 1A**

**Introduction to Automotive Collision Repair**

8 units; 3 hours lecture, 15 hours lab

Credit, degree applicable

Transfer CSU

The 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, vehicle construction, gas welding and brazing, hot shrinking, hammer forging, grinding, metal finishing, body solder, plastic filler, and primer.

**Automotive Collision Repair/Painting 1B**

**Collision Repair Equipment and Welding Techniques**

8 units; 3 hours lecture, 15 hours lab

Prerequisite: Automotive Collision Repair/Painting 1A with a minimum grade of C

Credit, degree applicable

Transfer CSU

The course provides instruction on collision repair equipment and welding techniques involving safety practices, Metal Inert Gas (MIG) welding, vehicle collision analysis and theory, hydraulic jacks, collision repair equipment and body component alignment principles.

Note: The two-course sequence Automotive Collision Repair/Painting 1A and 1B is the same as 4abcd. Students who have completed two semesters of Automotive Collision Repair/Painting 4abcd will not receive credit for 1A.

**Automotive Collision Repair/Painting 4abcd**

Credit, degree applicable

Transfer CSU

*Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center advisor, or the articulation officer.*

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2010-2011 El Camino College Catalog
Automotive Collision Repair/Painting - A.S. Degree and Certificates of Achievement and Accomplishment

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.

El Camino College Major Requirements
At least 50% of the major requirements for the Associate in Science Degree must be completed at El Camino College.
A minimum of 20 units from: Automotive Collision Repair/Painting 1A, 1B, 1C, 1D, 2A, 2B, 2C, 3A, 4abcd, 5abcd, 20, 22, 24, 26
Recommended electives: Automotive Collision Repair/Painting 95abcd, Machine Tool Technology 16ab, Technical Mathematics 1, Welding 15ab
Total Units: 20

Certificates of Achievement
A Certificate of Achievement will be granted to the student completing the courses in the Automotive Collision Repair/Painting I or Automotive Collision Repair/Painting II options. At least 50% of the courses required for the Certificate of Achievement must be completed at El Camino College.
Automotive Collision Repair/Painting I: Complete a minimum of 32 units from: Automotive Collision Repair/Painting 1A, 1B, 1C, 1D, 2A, 2B, 2C, 3A, 4abcd, 5abcd, 20, 22, 24, 26
Total Units: 32
Automotive Collision Repair/Painting II: Complete a minimum of 32 units from: Automotive Collision Repair/Painting 1A, 1B, 1C, 1D, 2A, 2B, 2C, 3A, 4abcd, 5abcd, 20, 22, 24, 26; complete 9-12 units from: English A or qualifying score for English 1A on English Placement Test, Machine Tool Technology 16ab, Technical Mathematics 1, Welding 15ab* [*one semester of]
Total Units: 41-44

Certificates of Accomplishment
A Certificate of Accomplishment will be granted to the student completing the courses in the Automotive Collision Investigation or the Automotive Accident Reconstruction options. At least 50% of the requirements for the Certificate of Accomplishment must be completed at El Camino College.
Automotive Collision Investigation: Automotive Collision Repair/Painting 20, 22
Total Units: 6
Automotive Accident Reconstruction: Automotive Collision Repair/Painting 24, 26
Total Units: 6

Automotive Collision Repair/Painting 1C
Major Collision Analysis and Repair
8 units; 3 hours lecture, 15 hours lab
Prerequisite: Automotive Collision Repair/Painting 1A with a minimum grade of C
Credit, degree applicable
Transfer CSU
This course provides instruction on major collision analysis and repair involving safety practices, major collision repair, sectioning, suspensions, front end alignment, estimating and electric welding.

Automotive Collision Repair/Painting 1D
Automatic Component Systems Analysis and Repair
8 units; 3 hours lecture, 15 hours lab
Prerequisite: Automotive Collision Repair/Painting 1A with a minimum grade of C
Credit, degree applicable
Transfer CSU
This course provides instruction on the principles of automotive collision repair and painting involving safety practices, window glass, plastics, vinyl tops, electric circuits, cooling systems, air conditioning, upholstery and electric welding.

Automotive Collision Repair/Painting 2A
Basic Automotive Painting - Refinishing
8 units; 3 hours lecture, 15 hours lab
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, VOC (Volatile Organic Compound) recording, surface identification, surface preparation, abrasives, metal conditioning, vehicle masking, primers, and spray equipment.
Note: The two-course sequence of Automotive Collision Repair/Painting 2A and 2B is the same as Automotive Collision Repair/Painting 5abcd.

Automotive Collision Repair/Painting 2B
Automotive Refinishing Materials and Equipment
8 units; 3 hours lecture, 15 hours lab
Prerequisite: Automotive Collision Repair/Painting 1A or 2A or one semester of 4abcd or 5abcd with a minimum grade of C in each prerequisite course 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.
Note: The two-course sequence of Automotive Collision Repair/Painting 2A and 2B is the same as Automotive Collision Repair/Painting 5abcd.

Automotive Collision Repair/Painting 2C
Automotive Refinishing Applications
8 units; 3 hours lecture, 15 hours lab
Prerequisite: Automotive Collision Repair/Painting 1A or 2A or one semester of 4abcd or 5abcd with a minimum grade of C in each prerequisite course or equivalent
Credit, degree applicable
Transfer CSU
This course provides instruction on 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.

The hours per week of courses may be adjusted based on the length of the term.
Automotive Collision Repair/Painting 3A
Introduction to Automotive Collision Estimating
1 unit; 1 hour lecture
Recommended Preparation: Automotive Collision Repair/Painting 1A or 2A or one semester of 4abcd or 5abcd or equivalent; eligibility for English 84
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.

Automotive Collision Repair/Painting 4abcd
Automotive Collision Repair: Collision Damage
4 units; 2 hours lecture, 7 hours lab
Credit, degree applicable
Transfer CSU

This course provides instruction on the principles of automotive collision repair/ painting involving safety practices, oxy-acetylene welding and brazing, electric welding, vehicle construction, metal working, grinding, plastic and solder filling, hydraulic body jacks, structural repairs, masking, and primer and spot painting.

Note: Four semesters of this course are the same as the two-course sequence of Automotive Collision Repair/Painting 1A and 1B.

Automotive Collision Repair/Painting 5abcd
Automotive Collision Repair: Applications
3 units; 6 hours lecture, 10 hours lab
(6 weeks course)
Credit, degree applicable
Transfer CSU

This course provides instruction on the principles of automotive collision repair and painting, including safety practices; vehicle construction, gas, and Metal Inert Gas (MIG) welding; sheet metal repair; High Volume Low Pressure (HVLP) guns; undercoat materials and complete painting.

Automotive Collision Repair/Painting 6abcd
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 skid-marks, the coefficient of friction, and speed from skid formulas.

Note: Four semesters of this course are the same as the two-course sequence of Automotive Collision Repair/Painting 2A and 2B.

*Some UC transferable courses have credit limitations.
For details, see a counselor, the Transfer Center advisor, or the articulation officer.
Automotive Collision Repair/Painting 95abcd

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 - limitations apply

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: The total units earned for CWEE may not exceed 16 units.

Automotive Collision Repair/Painting 99abc

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 - limitations apply

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 (60 hours per unit).

Note: Refer to page 11 of this Catalog for eligibility requirements.

Automotive Technology – A.S. Degree and Certificates of Achievement and Accomplishment

[Industry and Technology Division]

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.

El Camino College Major Requirements

Complete a minimum of: 8 units from Automotive Technology 22A or 23 and 24; 8 units from Automotive Technology 22B or 25 and 26 (or 8 units from Automotive Technology 71 and 72); 8 units from Automotive Technology 33 or 34 and 35; 8 units from Automotive Technology 11 or 14 and 16; one course from Automotive Technology 41, 42, 43, 45

Recommended electives: Technology Mathematics 1; Welding 15ab

Total Units: 36-40

Certificates of Achievement

A Certificate of Achievement will be granted to the student completing the courses in the Automotive Technician I or Automotive Technician II options. At least 50% of the courses required for the Certificate of Achievement must be completed at El Camino College.

Automotive Technician I:

8 units from: Automotive Technology 33 or 34 and 35;
8 units from: Automotive Technology 22A or 23 and 24;
8 units from: Automotive Technology 22B or 25 and 26;
one course from: Automotive Technology 41, 42, 43, 45;
8 units from: Automotive Technology 11 or 14 and 16

Total Units: 36-40

Automotive Technician II:

8 units from: Automotive Technology 33 or 34 and 35;
8 units from: Automotive Technology 22A or 23 and 24;
8 units from: Automotive Technology 22B or 25 and 26;
one course from: Automotive Technology 41, 42, 43, 45;
8 units from: Automotive Technology 11 or 14 and 16;
complete 6-10 units from: English A or qualifying score for English 1A on the English Placement Test, Technical Mathematics 1, Welding 15ab* or Machine Tool Technology 46 or Machine Tool Technology 101abcd* (*one semester of)

Total Units: 42-50

Certificates of Accomplishment

A Certificate of Accomplishment will be granted upon completion of the required courses in the Automotive Air Conditioning Technician or Automotive Brakes and Suspension Technician or Automotive Engine Rebuilding and Repair Technician or Automotive Transmission and Drive Train Technician options. At least 50% of the courses required for the Certificate of Accomplishment must be completed at El Camino College.

Automotive Air Conditioning Technician: Automotive Technology 81

Total Units: 3

Automotive Brakes and Suspension Technician: Automotive Technology 11 or 14 and 16

Total Units: 8

Automotive Engine Rebuilding and Repair Technician: Automotive Technology 41 or 42 or 43 and 45

Total Units: 8

Automotive Transmission and Drive Train Technician: Automotive Technology 33 or 34 and 35

Total Units: 8

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Automotive Technology 11
**Brakes, Suspension and Four Wheel Alignment**
8 units; 5 hours lecture, 10 hours lab
Recommended Preparation: Automotive Technology 1 or concurrent enrollment or industry experience
Credit, degree applicable
Transfer CSU

This course covers the study of brake systems, front and rear suspension systems, steering systems and their operation. Laboratory activities stress brake, suspension and steering diagnosis, repair, machining, overhaul, front wheel and four wheel alignment procedures and proper use of tools and equipment utilized in the field.

Note: This course is the same as the two-course sequence Automotive Technology 14 and 16. Students who have completed Automotive Technology 14 and 16 will not receive credit for Automotive Technology 11.

Automotive Technology 14
**Brakes**
4 units; 3 hours lecture, 3 hours lab
Recommended Preparation: Automotive Technology 1 or equivalent
Credit, degree applicable
Transfer CSU

This course covers the study of brake systems, including anti-lock brake systems (ABS) and their operation. Laboratory activities stress brake system diagnosis, repair, machining, overhaul procedures and proper use of tools and equipment utilized in the automotive industry.

Note: The two-course sequence Automotive Technology 14 and 16 is the same as Automotive Technology 16 and 22B.

Automotive Technology 16
**Suspension and Four Wheel Alignment**
4 units; 3 hours lecture, 3 hours lab
Recommended Preparation: Automotive Technology 1 or equivalent
Credit, degree applicable
Transfer CSU

This course covers the study of suspension and steering systems construction and their operation. Laboratory activities stress suspension and steering system diagnosis, repair, machining, overhaul, front wheel and four wheel alignment procedures and proper use of tools and equipment utilized in the automotive field.

Note: The two-course sequence Automotive Technology 14 and 16 is the same as Automotive Technology 11.

Automotive Technology 21
**Introduction to Engine Tune-up**
2 units; 2 hours lecture, 2 hours lab
Recommended Preparation: Automotive Technology 1 or equivalent
Credit, degree applicable
Transfer CSU

This course covers the study of minor engine tune-up, electrical systems and fuel systems theory and application. Laboratory activities stress the proper use of test equipment utilized in the industry.

Automotive Technology 22A
**Introduction to Tune-Up, Electrical and Fuel Systems**
8 units; 5 hours lecture, 10 hours lab
Recommended Preparation: Automotive Technology 1 or equivalent
Credit, degree applicable
Transfer CSU

This is an introductory engine tune-up course which covers construction and operation of the following systems: electrical charging, cooling, emission controls, fuel and ignition. Laboratory activities stress the proper use of test equipment and repair procedures used in the industry.

Note: This course is the same as the two-course sequence Automotive Technology 23 and 24. Students who have completed Automotive Technology 23 and 24 will not receive credit for Automotive Technology 22A.

Automotive Technology 22B
**Advanced Tune-Up, Electrical and Fuel Systems**
8 units; 5 hours lecture, 10 hours lab
Prerequisite: Automotive Technology 22A with a minimum grade of C or equivalent
Credit, degree applicable
Transfer CSU

This course covers the study of major tune-up, electrical systems and fuel systems (carburetion and fuel injection) testing, 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 Automotive Technology 25 and 26. Students who have completed Automotive Technology 25 and 26 will not receive credit for Automotive Technology 22B.

Automotive Technology 23
**Major Tune-Up and Emission Controls**
4 units; 3 hours lecture, 3 hours lab
Recommended Preparation: Automotive Technology 21 or equivalent
Credit, degree applicable
Transfer CSU

This course covers the study of major engine tune-up and 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 24 is the same as Automotive Technology 22B.

Automotive Technology 24
**Fuel Systems and Emissions**
4 units; 3 hours lecture, 3 hours lab
Recommended Preparation: Automotive Technology 21 or 23 or equivalent
Credit, degree applicable
Transfer CSU

This course covers the study of fuel system service, testing and diagnosis, including carburetor overhaul procedures, fuel injection and computer controlled fuel systems. Laboratory activities stress the proper use of test equipment utilized in the automotive field.

Note: The two-course sequence Automotive Technology 23 and 24 is the same as Automotive Technology 22B.

Automotive Technology 25
**Automotive Electrical Systems**
4 units; 3 hours lecture, 3 hours lab
Recommended Preparation: Automotive Technology 21 or 23 or equivalent
Credit, degree applicable
Transfer CSU

This course covers the theory and operation of automotive electronic components and systems. Laboratory activities stress proper use of test equipment utilized in the automotive field.

Note: The two-course sequence Automotive Technology 25 and 26 is the same as Automotive Technology 22B.

The hours per week of courses may be adjusted based on the length of the term.
Automotive Technology 26  
**Automotive Testing and Diagnosis**  
4 units; 3 hours lecture, 3 hours lab  
Prerequisite: A total of 8 units with a minimum grade of C is required from the following courses: Automotive Technology 22A, 23, 24, 25 or equivalent  
Credit, degree applicable  
Transfer CSU  
This course covers the study of advanced automotive testing and diagnostic procedures of the following systems: ignition, fuel, emissions, electrical and electronic, and computer control systems. Laboratory activities stress the proper use of diagnostic equipment utilized in the automotive field.  
*Note: The two-course sequence Automotive Technology 25 and 26 is the same as Automotive Technology 22B.*

Automotive Technology 33  
**Transmission, Drive Train and Drive Axles**  
8 units; 5 hours lecture, 10 hours lab  
Recommended Preparation: Automotive Technology 1 or equivalent  
Credit, degree applicable  
Transfer CSU  
This course covers the study of automatic transmissions, manual transmissions, clutch, drive line and drive axle construction and operation. Laboratory activities stress drive train diagnosis, repair, overhaul procedures and the proper use of tools utilized in the field.  
*Note: This course is the same as two-course sequence Automotive Technology 34 and 35. Students who have completed Automotive Technology 34 and 35 will not receive credit for Automotive Technology 33.*

Automotive Technology 34  
**Automatic Transmissions**  
4 units; 3 hours lecture, 3 hours lab  
Recommended Preparation: Automotive Technology 1 or equivalent  
Credit, degree applicable  
Transfer CSU  
This course covers the study of automatic transmission construction and operation. Laboratory activities stress diagnosis, repair, overhaul procedures and the proper use of tools utilized in the automotive field.  
*Note: The two-course sequence Automotive Technology 34 and 35 is the same as Automotive Technology 33. Students who have completed Automotive Technology 34 and 35 will not receive credit for Automotive Technology 34 or 35.*

Automotive Technology 35  
**Manual Transmission, Drive Train and Drive Axles**  
4 units; 3 hours lecture, 3 hours lab  
Recommended Preparation: Automotive Technology 1 or equivalent  
Credit, degree applicable  
Transfer CSU  
This course covers the study of manual transmission, clutch, drive line and drive axle construction and operation. Laboratory activities stress diagnosis, repair, overhaul procedures and the proper use of tools utilized in the automotive field.  
*Note: The two-course sequence Automotive Technology 34 and 35 is the same as Automotive Technology 33. Students who have completed Automotive Technology 34 and 35 will not receive credit for Automotive Technology 34 or 35.*

Automotive Technology 41  
**Engine Rebuilding**  
8 units; 5 hours lecture, 10 hours lab  
Recommended Preparation: Automotive Technology 1 or equivalent  
Credit, degree applicable  
Transfer CSU  
This course stresses engine construction, operation, diagnosis and the proper rebuilding procedures. Laboratory activities stress the proper use of tools and equipment utilized in the field.  
*Note: This course is the same as two-course sequence Automotive Technology 34 and 35. Students who have completed Automotive Technology 34 and 35 will not receive credit for Automotive Technology 34 or 35.*

Automotive Technology 42  
**Engine Repair**  
8 units; 5 hours lecture, 10 hours lab  
Recommended Preparation: Automotive Technology 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 and engine maintenance. Laboratory activities stress the proper use of equipment utilized in the automotive field.

Automotive Technology 43  
**Introduction to Engine Repair**  
4 units; 3 hours lecture, 3 hours lab  
Recommended Preparation: Automotive Technology 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 and engine maintenance. Laboratory activities stress the proper use of equipment utilized in the automotive field.

Automotive Technology 45  
**Automotive Machining**  
4 units; 3 hours lecture, 3 hours lab  
Recommended Preparation: Automotive Technology 1 or equivalent  
Credit, degree applicable  
Transfer CSU  
This course is designed to explore topics in the machining processes used in the automotive trade, including but not limited to: drilling and tapping, milling, boring and honing, pin fitting, press work, resurfacing, reaming, knurling, repairing of damaged threads, measuring, grinding, and crack detection methods and repairing. Laboratory activities stress proper use of equipment utilized in the automotive field.

Automotive Technology 50  
**Special Topics in Automotive Technology**  
Units determined by individual course; lecture/lab hours determined by individual course  
Credit status determined by individual course  
This course is designed to explore topics in Automotive Technology more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

*Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center advisor, or the articulation officer.*
Automotive Technology 80
California Basic Area Clean Air Car Course
4 units; 4 hours lecture, 1 hour lab
Prerequisite: 8 units from the following courses: Automotive Technology 21, 22A, 22B, 23, 24, 25 or equivalent trade experience
Credit, degree applicable
Transfer CSU
Students and Technicians who desire to become state of California Licensed Smog Check technicians, must take the Basic Clean Air Car Course. Successful completion of this course partially satisfies the education requirements for the state Smog Check Technicians License. It is highly recommended that students entering into this course have one year experience/education in the automotive engine performance area. This course covers the study of proper procedures for inspection, testing, repair and certification of vehicle emissions within California Clean Air Car Standards. Emphasis is placed on Bureau of Automotive Repair (BAR) Rules and Regulations, BAR Emission Inspection System operation procedures, OBDII operation and O2/Air Fuel Sensor Testing.

Automotive Technology 81
Automotive Air Conditioning
3 units; 2 hours lecture, 4 hours lab
Credit, degree applicable
Transfer CSU
In this course students are introduced to refrigeration principles, system component functions, and proper testing procedures as they apply to automotive air conditioning. The course stresses the analysis of collected data, resulting in accurate diagnosis, repair, and service.

Automotive Technology 95abcd
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 - limitations apply
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: The total units earned for CWEE may not exceed 16 units.

Automotive Technology 99abc
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 - limitations apply
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 (60 hours per unit).
Note: Refer to page 11 of this Catalog for eligibility requirements.

Biology

Biology 8
Biology of Plants
4 units; 3 hours lecture, 3 hours lab
Recommended Preparation: eligibility for English 1A
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.

Biology 10
Fundamentals of Biology
4 units; 3 hours lecture, 3 hours lab
Recommended Preparation: English 84
Credit, degree applicable
Transfer CSU, UC*
This course is a survey of 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 Biology 101.

The hours per week of courses may be adjusted based on the length of the term.
Biology – A. S. Degree
(Natural Sciences Division)

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 archaea, euarchaeo, protist, fungi, and plant and animal kingdoms. Competency will be measured by exams and laboratory skills as dissections, microbiological techniques, microscopy, and electrophoresis.

Preparation for the Transfer Major
For information on specific university major requirements, please obtain a transfer curriculum guide from 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 16
Field Entomology
4 units; 2 hours lecture, 6 hours lab
Recommended Preparation: eligibility for English 84
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.

Biology 17
Marine Biology
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 84
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.

Biology 18
Marine Biology Laboratory
1 unit; 3 hours lab
Prerequisite: Biology 17 with a minimum grade of C or concurrent enrollment
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.

Biology 50
Special Topics in Biology
Units determined by individual course; lecture/lab hours determined by individual course
Credit determined by individual course
This course is designed to explore topics in Biology more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

Biology 99abc
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 acknowledgement by the instructor with whom the student will work
Credit, degree applicable
Transfer CSU, UC - limitations apply
This course provides the student an opportunity to explore research problems in life science not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned laboratory work and research projects (60 hours per unit).
Note: Refer to page 11 of this Catalog for eligibility requirements.

Biology 101
Principles of Biology I
5 units; 3 hours lecture, 6 hours lab
Prerequisite: Chemistry 4 with minimum grade of C or the equivalent
Recommended Preparation: eligibility for English 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 Chemistry 1A be taken concurrently in preparation for Biology 102.

*Some UC transferable courses have credit limitations.
For details, see a counselor, the Transfer Center advisor, or the articulation officer.
Biology 102
*Principles of Biology II*
5 units; 3 hours lecture, 6 hours lab
Prerequisite: Chemistry 1A with minimum grade of C or the equivalent
Recommended Preparation: eligibility for English 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.

Biology 103
(formerly Biology 1C)
*Fundamentals of Molecular Biology*
3 units; 3 hours lecture
Prerequisite: Biology 101 and 102 with a minimum grade of C in each course; Chemistry 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.

Biology 104
*Molecular Biology Laboratory*
1.5 units; 3 hours lab
Prerequisite: Biology 103 with a minimum grade of C or equivalent or concurrent enrollment
Credit, degree applicable
Transfer CSU
This course provides basic techniques in protein and nucleic acid experimentation. The content reinforces concepts presented in the Fundamentals of Molecular Biology course. Methodologies covered include protein purification and quantitation, determination of enzymatic activity, SDS-PAGE, Western Blotting, ELISA, DNA extraction and quantitation, agarose gel electrophoresis, DNA recombination, transformation of E. coli, clone selection and screening, PCR, and Southern Blotting.

Biotechnology

Biotechnology 1
*Basic Techniques of Biological Technology*
2.5 units; 6 hours lab
Prerequisite: Chemistry 4 with a minimum grade of C or equivalent
Recommended Preparation: eligibility for English 1A
Credit, degree applicable
Transfer CSU
This course provides fundamental skills for the biotechnology laboratory. This is the first of two courses in biotechnology techniques. Methodologies include protein purification with column chromatography and quantitation with a spectrophotometer; protein characterization with SDS-PAGE and Western Blotting; ELISA; PCR; and Southern Blotting. Bioinformatics introduction and instruction are carried out with internet databases. Skills learned in the first biotechnology course are reinforced, including the use and maintenance of basic laboratory equipment, the practice of quality control and laboratory safety.

Biotechnology 2
*Advanced Techniques of Biological Technology*
2.5 units; 6 hours lab
Prerequisite: Biotechnology 1 with a minimum grade of C
Credit, degree applicable
Transfer CSU
This course provides advanced skills for the biotechnology laboratory. This is the second of two courses in biotechnology techniques. Methodologies include protein purification with column chromatography and quantitation with a spectrophotometer; protein characterization with SDS-PAGE and Western Blotting; ELISA; PCR; and Southern Blotting. Bioinformatics introduction and instruction are carried out with internet databases. Skills learned in the first biotechnology course are reinforced, including the use and maintenance of basic laboratory equipment, the practice of quality control and laboratory safety.

Botany
See Biology

Building
See Construction Technology

Business

Business 1A
*Financial Accounting*
4 units; 4 hours lecture, 1 hour lab
Recommended Preparation: eligibility for English 1A
Credit, degree applicable
Transfer CSU - limitations apply, UC
This is an introductory course covering the fundamentals of financial accounting of the corporate entity. Topics include ethics, the analysis, recording, and summarizing of accounting transactions on the accrual basis in preparing financial statements. 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.

*Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center advisor, or the articulation officer.
Business 1B
Managerial Accounting
4 units; 4 hours lecture, 1 hour lab
Prerequisite: Business 1A with a minimum grade of C
Credit, degree applicable
Transfer CSU - limitations apply, UC
This course emphasizes advanced accounting theory, principles and practices for the corporate form of ownership. A major focus of the course is on managerial, cost, and manufacturing accounting and related issues in the corporate environment.

Business 2A
Intermediate Accounting
3 units; 3 hours lecture
Prerequisite: Business 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.

Business 2B
Intermediate Accounting
3 units; 3 hours lecture
Prerequisite: Business 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.

Business 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 P/NP option.

Business – A.S. Degree and Certificates of Achievement
(Business Division)

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.

El Camino College Major and Certificate 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.

Accounting Major
Business 1A, 1B, 2A, 2B; Computer Information Systems 13; Law 5; two courses from the following: Business 4, 5A; Law 6
Total Units: 26-27

Certificate of Achievement – Accounting
A Certificate of Achievement will be granted to the student who completes the courses listed below. At least 15 units of the certificate requirements must be completed at El Camino College.
Business 1A, 1B, 2A, 2B, Computer Information Systems 13, Law 5; two courses from the following: Business 4, 5A, Law 6
Total Units: 26-27

(Continued on next page)
Business 4
Cost Accounting
3 units; 3 hours lecture
Prerequisite: Business 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. A major focus is on job order, process, and standard cost methods.

Business 5A
Income Tax Accounting
4 units; 4 hours lecture
Prerequisite: Business 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. A major focus of this course is on income inclusions, exclusions, exemptions, capital gains and losses, business and individual deductions.

Business 5C
Income Tax Microcomputer Applications
1 unit; 0.5 hour lecture, 1 hour lab
Prerequisite: Business 5A with a minimum grade of C or concurrent enrollment or equivalent experience
Credit, degree applicable
Transfer CSU
This course is an introduction to computer application in tax preparation and planning. A major focus of the course is on preparation and analysis of tax returns by using a current tax software program.
Note: Letter grade or P/NP option.

Business 11
Accounting for Small Business
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 84
Credit, degree applicable
Transfer CSU
This course includes basic accounting procedures, preparation and analysis of financial statements, banking, payroll processes, and special accounting journals. This is an accounting course for small business in service and retail environments.
Note: This course is not open to students who have credit for or are currently enrolled in Business 1A. Not recommended for the student who has completed two years of high school bookkeeping with a grade of C or better.
Business 16
10-Key Calculating for Business
1 unit; 0.5 hour lecture, 1.5 hours lab
Credit, degree applicable
This course offers instruction and practice for developing speed and accuracy on the 10-key computer keypad using proper touch techniques. Students will apply basic math and calculator functions to typical business tasks such as bank reconciliations, invoice preparation and audit, calculation of interest and discounts, pricing markups and markdowns, and payroll earnings and taxes.

Business 17
Personal Finance
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 84
Credit, degree applicable
Transfer CSU
In this course basic economic issues applied to individual and family management, such as financial planning, record keeping, budgeting, managing money, credit, and taxes are covered. Housing and other major expenditures, protecting assets through insurance and other means, investing in stocks, bonds, mutual funds, and real estate, as well as retirement planning are emphasized.
Note: Letter grade or P/NP option.

Business 19
Principles of Retailing Management
3 units; 3 hours lecture
Recommended Preparation: eligibility for English A
Credit, degree applicable
This course is a study of the principles and practices used in the management of retail stores. Topics include site selection, layout, organization, staffing, positioning, customer service, promotional techniques and all aspects of the critical buying function.
Note: Letter grade or P/NP option.

Business 20
Business Management
3 units; 3 hours lecture
Credit, degree applicable
Transfer CSU
This course is a study of basic business management concepts and theories in a global, competitive environment. Emphasis is on an operational analysis of the manager’s role in multinational business organizations. Also emphasized are the principles of Total Quality Management and the traditional management functions of planning, organizing, staffing, leading, and controlling.
Note: Letter grade or P/NP option.
Business 21  
**Personnel Management**  
3 units; 3 hours lecture  
Recommended Preparation: eligibility for English 84  
Credit, degree applicable  
Transfer CSU  

In this course students will gain an understanding of effective utilization of human resources in the business enterprise. Emphasis is on principles of personnel administration, supervisory and leadership techniques, human relations, concepts of motivation, business communication, and laws governing the rights of employers and employees. Effective management of common types of personnel problems will be discussed.

Business 22  
**Human Relations in Business**  
3 units; 3 hours lecture  
Recommended Preparation: eligibility for English 84  
Credit, degree applicable  
Transfer CSU  

In this course students will examine human relations theories and applications that will promote effective work relationships. Ethical issues in business are addressed as well as an explicit process of ethical reasoning that will aid in defining and dealing with dilemmas in the workplace. Current events and case studies will be used to develop critical skills as students apply theories and principles.  
*Note: Letter grade or P/NP option.*

Business 24  
**Introduction to Small Business Entrepreneurship**  
3 units; 3 hours lecture  
Recommended Preparation: eligibility for English 84  
Credit, degree applicable  
Transfer CSU  

This course is designed to provide a systematic approach to planning, developing, and operating a small business. Students will focus on building skills needed to initiate and manage business ventures. The course will emphasize developing the expertise needed to analyze consumer and business trends and to use this information in planning and developing a business venture. Areas of concentration include the principles of developing new products, acquiring financing, drafting a business plan, advertising, taxation, accounting, legal forms of organizations, and e-commerce in a global environment.  
*Note: Letter grade or P/NP option.*

Business 25  
**Introduction to Business**  
3 units; 3 hours lecture  
Recommended Preparation: eligibility for English 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 multi-cultural and globalized environment.  
*Note: Letter grade or P/NP option.*

Business 27  
**Effective English for Business**  
3 units; 3 hours lecture  
Prerequisite: eligibility for English 1A  
Credit, degree applicable  
Transfer CSU  

This is a comprehensive course designed to strengthen and refine the student’s ability to intelligently express and communicate through written language in a business environment. The course will focus on the methods of organizing and presenting business data and ideas in written explanatory and persuasive formats as well as the structural relationships in language. Assignments are designed to stimulate thought and discussion as well as to formulate clear and precise expression of ideas.

Business 28  
**Written Business Communications**  
3 units; 3 hours lecture  
Prerequisite: eligibility for English 1A  
Credit, degree applicable  
Transfer CSU  

In this course students will study the theory and practice of functional writing to give them an understanding of the human relations aspects of communication, to help develop logical patterns of organizing ideas, and to aid in achieving clear, concise expression. Practice in writing various types of business letters and reports will be emphasized throughout the course.

Business 29  
**Oral Business Communications**  
3 units; 3 hours lecture  
Recommended Preparation: eligibility for English A  
Credit, degree applicable  
Transfer CSU  

In this course, students will learn the principles of effective speaking in business situations. Interviews, conferences, briefings, and group discussions will be covered. Techniques of research, preparation, presentation, and evaluation are emphasized.  
*Note: This course is the same as Supervision 27.*

Business 40  
**Career Orientation**  
2 units; 2 hours lecture  
Recommended Preparation: eligibility for English 84  
Credit, degree applicable  
Transfer CSU  

In this course the student will explore opportunities and requirements in careers of interest. The course provides instruction and practice in the job application process, including resumes and interviews. Behaviors and qualities necessary for continued career satisfaction and development are analyzed.

Business 41  
**Records/Information Management**  
2 units; 2 hours lecture  
Recommended Preparation: eligibility for English 84 or English A  
Credit, degree applicable  
Transfer CSU  

In this course, students are introduced to the field of records/information management. Students learn the procedures of alphabetic, geographic, subject, and numeric filing and how to apply the alphabetic rules to the computer. Students also learn the principles of records retention and transfer and the various controls of a records/information management program.  
*Note: This class is offered in the spring semesters only.*

Business 43  
**Office Procedures**  
3 units; 3 hours lecture  
Recommended Preparation: Business 60A or concurrent enrollment or the ability to keyboard by touch; eligibility for English A  
Credit, degree applicable  
Transfer CSU  

This course is designed to develop an understanding of and ability to apply American business office procedures, responsibilities, and standards, and to develop an awareness of the globalization of American business.  
*Note: This course is offered fall semesters only.*

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*Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center advisor, or the articulation officer.*
Business 49abcd

**Voice Recognition for Computer Input**

1 unit; 0.5 hour lecture, 1.5 hours lab
Recommended Preparation: eligibility for English A and English 84
Credit, degree applicable
Transfer CSU

Students use voice-recognition software to input information into the computer by voice. The course focuses on learning dictation commands and techniques for continuous voice dictation, formatting and editing documents, and all menu and keyboard manipulations.

*Note: Letter grade or P/NP option.*

Business 50

**Special Topics in Business**

Units determined by individual course; lecture/lab hours determined by individual course
Credit status determined by individual course

This course is designed to explore topics in Business more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

Business 52A

**Microsoft Word Applications I**

2 units; 1 hour lecture, 2 hours lab
Recommended Preparation: Business 52A or equivalent experience with Microsoft Word
Credit, degree applicable
Transfer CSU

In this course, students will learn the basics of Microsoft Word software in a Windows environment. Topics covered include creating, saving, retrieving, printing, and managing documents. Students will also learn to efficiently edit documents using mouse and keyboard; manipulate text within and between windows; use editing tools, including spell and grammar checker, thesaurus, translation, and research features; change fonts and format text with styles, themes, templates, and special features; manipulate tabs and change margins, spacing, and alignment; create multiple-page documents and insert page numbers, headers, and footers; draw shapes and insert images, textboxes, borders, and shading; and create tables and charts.

*Note: Letter grade or P/NP option.*

Business 52B

**Microsoft Word Applications II**

2 units; 1 hour lecture, 2 hours lab
Recommended Preparation: Business 52A or equivalent experience with Microsoft Word
Credit, degree applicable
Transfer CSU

In this course, students will learn advanced features of Microsoft Word software in a Windows environment. Topics covered include merging documents; tracking and comparing changes in documents; customizing Word options, styles, and themes; creating fill-in form templates; and protecting and preparing documents for distribution. Students will also learn to use Word features in research papers to automate the creation of references, bibliographies, and indexes as well as tables of contents, figures and authorities.

*Note: Letter grade or P/NP option.*

Business 56abcd

**Microsoft Word Certification Preparation**

1 unit; 0.5 hour lecture, 1 hour lab
Prerequisite: Business 52A or Business 54 or Computer Information Systems 13 with a minimum grade of C in prerequisite or equivalent experience with Microsoft Word
Credit, degree applicable
Transfer CSU

This course prepares students for Microsoft Word certification exams. Students will assess existing Word skills, analyze weaknesses, and build proficiency in skill sets required for Microsoft Word certification. An optional Microsoft Word certification test is offered on completion of the course for an additional fee.

*Note: Pass/no pass only*

Business 57abcd

**PowerPoint Certification Preparation**

1 unit; 0.5 hour lecture, 1 hour lab
Prerequisite: Business 54 or Computer Information Systems 13 with a minimum grade of C in prerequisite or equivalent experience with Microsoft PowerPoint
Credit, degree applicable
Transfer CSU

This course prepares students for Microsoft PowerPoint certification exams. Students will assess existing PowerPoint skills, analyze weaknesses, and build proficiency in skills sets required for Microsoft PowerPoint certification. An optional Microsoft PowerPoint certification test is offered on completion of the course for an additional fee.

*Note: Pass/no pass only*

Business 60A

**Microcomputer Keyboarding**

1 unit; 0.5 hour lecture, 1.5 hours lab to be arranged
Credit, degree applicable
Transfer CSU

In this course the student will learn the touch keyboarding method for alphabetic and numeric/symbol keys on micro-computers. The course aids the student in developing the fundamental skills necessary to input information efficiently and accurately. This course is recommended for students interested in developing basic computer keyboarding skills.

*Note: Letter grade or P/NP option.*
Business 60B
**Microcomputer Document Processing**  
1 unit; 0.5 hour lecture, 1.5 hours lab to be arranged  
Prerequisite: Business 60A with a minimum grade of C or equivalent  
Credit, degree applicable  
Transfer CSU  
In this course the student will use a word processing program to prepare documents in various business formats and will build touch skill in speed and accuracy. Examples of business documents include business correspondence, 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 P/NP option.*

Business 60C
**Microcomputer Document Formatting**  
1 unit; 0.5 hour lecture, 1.5 hours lab to be arranged  
Prerequisite: Business 60B with a minimum grade of C or equivalent  
Credit, degree applicable  
Transfer CSU  
In this course the student will use a microcomputer word processing program to increase touch skill in speed and accuracy. Formatting various kinds of business correspondence, reports, and tabulations from unarranged and rough draft sources is also emphasized. This course is recommended for students who need to develop speed and accuracy skill as well as document formatting proficiency for personal and business use.  
*Note: Letter grade or P/NP option.*

Business 90
**International Aspects of Business**  
3 units; 3 hours lecture  
Recommended Preparation: eligibility for English 84  
Credit, degree applicable  
Transfer CSU  
In this course students will study international business theories. Topics will include cross-cultural relations, comparative economic systems, comparative political systems, and international economics. Law and international trade, foreign exchange, letters of credit, export requirements, and emerging issues in international trade will also be covered.  
*Note: Letter grade or P/NP option.*

Business 91
**International Marketing**  
3 units; 3 hours lecture  
Recommended Preparation: Business 90 with a minimum grade of C or concurrent enrollment or equivalent experience  
Credit, degree applicable  
Transfer CSU  
In this course, the student will gain an understanding of the nature and extent of international marketing, as well as the challenges of marketing internationally and how marketers approach and manage these challenges. Topics include the economic, political, environmental, and cultural factors that affect international marketing as well as the tools and resources available to assess these factors. Selection of viable markets, options available to marketers to develop a global and international strategy, and individual marketing strategies for specific countries will also be discussed.

Business 92
**Fundamentals of Exporting**  
3 units; 3 hours lecture  
Recommended Preparation: Business 90 with a minimum grade of C or concurrent enrollment or equivalent experience  
Credit, degree applicable  
Transfer CSU  
In this course, the student will gain an understanding of the role of exporting in a global economy and the key steps involved in the export process. Topics will include evaluation of a company’s export readiness and potential, market research, identification of the best export markets, development of export market plans, and market entry strategies. Promotion of overseas sales, finding buyers and distributors, responding to inquiries, calculation of export prices, issuance of pro forma invoices, preparation of goods for shipment, preparation of the necessary export documentation, insurance, financing, and delivery of goods will also be covered.

Business 93
**Fundamentals of Importing**  
3 units; 3 hours lecture  
Recommended Preparation: Business 90 with a minimum grade of C or equivalent experience  
Credit, degree applicable  
Transfer CSU  
In this course students will analyze the balance of trade between the United States and other countries. Topics will include the effects of imports on the economy, employment, and the standard of living in the United States. Importing as a business, the import process, the role of United States Customs, and distribution from the port of entry to United States markets will also be covered.

Business 94
**International Trade Logistics**  
3 units; 3 hours lecture  
Recommended Preparation: Business 90 with a minimum grade of C or equivalent experience  
Credit, degree applicable  
Transfer CSU  
In this course students will examine logistical and documentary aspects of moving goods internationally from source to final destination. Emphasis will be placed on all modes of transportation involved in doing business on a global basis as well as the shipping and other documents required for specific trade transactions. Topics will also include international commercial terms (Incoterms) commonly used for pricing and transport of goods as well as the roles of freight forwarders, carriers, and other providers of logistics and document-preparation services.

Business 95abcd
**Cooperative Work Experience Education (Banking and Finance)**  
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 - limitations apply  
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/Banking and Finance 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 CWEE may not exceed 16 units.*

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The hours per week of courses may be adjusted based on the length of the term.

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*Some UC transferable courses have credit limitations.  
For details, see a counselor, the Transfer Center advisor, or the articulation officer.*
Business 95abcd
Cooperative Work Experience Education (Office Administration)
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 - limitations apply
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/Office Administration 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 CWEE may not exceed 16 units.

Business 95/96abcd
Cooperative Work Experience Education (Accounting)
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 - limitations apply
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/Accounting 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 CWEE may not exceed 16 units.

Business 96abcd
Cooperative Work Experience Education (Business Administration)
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 - limitations apply
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 Administration 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 CWEE may not exceed 16 units.

Business 97
International Business Law
3 units; 3 hours lecture
Recommended Preparation: Business 90 with a minimum grade of C or equivalent experience
Credit, degree applicable
Transfer CSU
In this course students will study legal and regulatory aspects of international business. Emphasis is on the tariff and non-tariff measures used by governments to regulate trade, multilateral and bilateral treaties, and agreements to facilitate trade. Other topics will include the United States and international agencies charged with administering and enforcing specific trade laws and regulations.

Cabinet Making
See Construction Technology
Chemistry

Chemistry 4

**Beginning Chemistry**
5 units; 5 hours lecture, 4 hours lab
Prerequisite: Mathematics 70 with a minimum grade of C or equivalent or qualification by testing [El Camino College Mathematics Placement Test] and assessment. 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 Chemistry 20 is one course. Students will not receive UC credit for Chemistry 4 if taken after Chemistry 1A.

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*Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center advisor, or the articulation officer.

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Chemistry 1A

**General Chemistry I**
5 units; 5 hours lecture, 4 hours lab
Prerequisite: Chemistry 4 with a minimum grade of C or 1 year of high school chemistry and qualification by testing [El Camino College Chemistry Placement Test] and assessment. 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.

Chemistry 1B

**General Chemistry II**
5 units; 5 hours lecture, 4 hours lab
Prerequisite: Chemistry 1A with a minimum grade of C
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 non-metallic ions will be performed, as well as additional experiments on selected lecture topics.

Chemistry 7A

**Organic Chemistry I**
5 units; 3 hours lecture, 6 hours lab
Prerequisite: Chemistry 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.

Chemistry 7B

**Organic Chemistry II**
5 units; 3 hours lecture, 6 hours lab
Prerequisite: Chemistry 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 multi-step synthesis.

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Chemistry – A.S. Degree

(Natural Sciences Division)

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 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.
Chemistry 20
Fundamentals of Chemistry
5 units; 4 hours lecture, 3 hours lab
Prerequisite: Mathematics 40 or 41B with a minimum grade of C in prerequisite or qualification by testing [El Camino College Mathematics Placement Test] and assessment
Recommended Preparation: eligibility for English 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 Chemistry 4 and Chemistry 20 is one course. Students will not receive UC credit for Chemistry 20 if taken after Chemistry 1A.

Chemistry 21A
Survey of General and Organic Chemistry
4 units; 4 hours lecture, 2 hours lab
Prerequisite: eligibility for Mathematics 70
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 stereochemistry. The emphasis in the laboratory is on observations and measurements.
*Note: Students will not receive UC credit for Chemistry 21A if taken after Chemistry 1A or Chemistry 7A.

Chemistry 21B
Survey of Organic and Biochemistry
4 units; 4 hours lecture, 2 hours lab
Prerequisite: Chemistry 21A with a minimum grade of C
Credit, degree applicable
Transfer CSU, UC*
The study of organic chemistry continues with the nomenclature, properties, prepartion, 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 Chemistry 7B.

Chemistry 50
Special Topics in Chemistry
Units determined by individual course; lecture/lab hours determined by individual course
Credit status determined by individual course
This course is designed to explore topics in Chemistry more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

Chemistry 99abc
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, UC - limitations apply
This course provides the student an opportunity to explore research problems in Chemistry not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned laboratory work and research projects (60 hours per unit).
Note: Refer to page 11 of this Catalog for eligibility requirements.

*Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center advisor, or the articulation officer.
Child Development 103
(formerly Child Development 3)
Child Growth and Development
3 units; 3 hours lecture
Recommended Preparation: eligibility for
English 1A
Credit, degree applicable
Transfer CSU, UC
This course is an introduction to child
development from conception through
adolescence with emphasis on physical,
cognitive and psychosocial growth. The
effect of environmental and cultural influ-
ences on development will be investigated.
Developmental theories will be analyzed
and tested through practical applications
such as child observations and interviews.
Note: This is a core course for all teachers and
assistants in early childhood programs regulated
by the State of California.

Child Development 104
(formerly Child Development 9)
The Home, The School,
The Community
3 units; 3 hours lecture
Recommended Preparation: eligibility for
English 1A
Credit, degree applicable
Transfer CSU, UC
This course examines the interconnection
among the development of the child from
birth to adolescence and the home/family,
the school, and the community. Emphasis
is placed on the influences of social agents
such as family support services, education-
al systems, media, and peers and on how
these social agents contribute in preparing
the child for living independently in a
diverse society. Topics will include parent-
ing 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.

Childhood Education – A.A. Degree and
Certificates of Achievement
(Behavioral and Social Sciences Division)
The degree and the certificates in childhood education prepare 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. Students will acquire the ability
to apply developmental theories in observing and assessing children in physical, cogni-
tive, 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 sensi-
tive curriculum. Program assessment will be conducted regularly through examina-
tions, presentations, student self-assessment, portfolios, and tracking student employ-
ment and promotion in the teaching field.

El Camino College Major Requirements
A minimum of 15 units of the major requirements must be completed at El Camino Col-
lege.
Child Development 103, 104, 112, 114; Child Development 150 or 152; two courses
from Child Development 116, 117, 118, 119; complete 8-9 units from Child Develop-
ment 105, 107, 108, 110, 114, 116, 117, 118, 119, 122, 123, 125, 126, 129, 130, 131, 150,
152, 154, 160, 163, 166, 169, 170A, 170B, Nutrition and Foods 15
Total Units: 29-30

Note: Proof of a valid Pediatric CPR and First Aid Certification may be required for
employment. This requirement may be met by successfully completing Child Devel-
opment 111.

Certificates of Achievement
Early Childhood Education:
A Certificate of Achievement will be granted upon completion of the courses listed
below. A minimum of 12 units must be completed at El Camino College. Child Develop-
ment 103, 104, 108, 112, 114; one course from Child Development 116, 117, 118, 119
Total Units: 18
Early Intervention Assistant:
A Certificate of Achievement will be granted upon completion of the courses listed
below. A minimum of 15 units, including Child Development 169, must be completed
at El Camino College.
Child Development 103, 104, 107, 110, 111, 150, 152, 169; three units from: Child Devel-
opment 116, 117, 119; three units from: Child Development 114, 154, 160, 163, 166
Total Units: 28
Special Education Assistant:
A Certificate of Achievement will be granted upon completion of the courses listed
below. A minimum of 15 units of the certificate requirements, including Child Devel-
opment 152 and 154, must be completed at El Camino College.
Child Development 103, 104, 111, 150, 152, 154, 169; one course from Child Develop-
ment 110 or Nursing 112; one course from Child Development 116, 117, 118, 119; six
units from: Child Development 107, 108, 114, 122, 123,163, 166, 170A, 170B, Nursing
118, Nutrition and Foods 15, Sign Language/Interpreter Training 15
Total Units: 31

For information regarding the School Health Clerk Certificate of Achievement, please refer to
page 222 of this Catalog.

(Continued on next page)
The following Child Development Permits are issued:

101 or Anthropology 2.

The courses for this requirement are: Biology 10; English 1A, 27; Psychology 5 or Sociology 101 or Anthropology 2.

Some Child Development Permits require 16 general education units. Recommended activities and/or conference and workshop attendance.

A minimum grade of C is required in all Child Development courses applied toward the Child Development Permit.

Some Child Development Permits require 16 general education units. Recommended courses for this requirement are: Biology 10; English 1A, 27; Psychology 5 or Sociology 101 or Anthropology 2.

The following Child Development Permits are issued:

1. **Assistant**: 6 units in Early Childhood Education. Child Development 103 and 104 are recommended. Experience: none required.

2. **Associate Teacher**: 12 units in Early Childhood Education to include: Child Development 103, 104, and one course from Child Development 116, 117, 118, 119; remaining 3 units may be selected from Child Development 107, 108, 110, 111, 112, 116, 117, 118, 119, 122, 123, 131, 150, 152, 154; Nursing 112, Nutrition and Foods 15; Experience: 50 days of 3 hours per day within 2 years.

3. **Teacher**: 24 units in Early Childhood Education to include: Child Development 103, 104, and one course from Child Development 116, 117, 118, 119; remaining units may be selected from Child Development 107, 108, 110, 111, 112, 116, 117, 118, 119, 122, 123, 126, 129, 130, 131, 150, 152, 154; 95/96abcd; Nutrition 112, Nutrition and Foods 15; 16 general education units; Experience: 175 days of 3 hours per day within 4 years.

4. **Master Teacher**: 24 units in Early Childhood Education to include: Child Development 103, 104, and one course from Child Development 116, 117, 118, 119; remaining units may be selected from Child Development 107, 108, 110, 111, 112, 116, 117, 118, 119, 122, 123, 126, 129, 130, 150, 152, 154, 95/96abcd; Nursing 112, Nutrition and Foods 15; 6 units specialization; Child Development 131; 16 general education units; Experience: 50 days of 3 hours per day within 4 years.

5. **Site Supervisor**: AA Degree with 24 units in Early Childhood Education to include: Child Development 103, 104, and one course from Child Development 116, 117, 118, 119; 6 units of Program Administration (Child Development 129, 130); remaining units may be selected from Child Development 107, 108, 110, 111, 112, 116, 117, 118, 119, 122, 123, 126, 150, 152, 154; Nursing 112, Nutrition and Foods 15; Child Development 131; Experience: 350 days of 3 hours per day within 4 years; including at least 100 days of supervising adults.

For further information, please contact a counselor or the Childhood Education Department.

Preparation for the 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.

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**Child Development 105**
(formerly Child Development 135)

**Parenting in Contemporary Society**

3 units; 3 hours lecture 
Credit, degree applicable 
Transfer CSU

In this course, students will examine the principles and practices of effective parenting for children from birth through adolescence. Historical perspectives of parenting styles and methods will be discussed. Topics will include appropriate techniques for guiding behavior, the influences of school, community, and media in family life, child abuse and prevention, the diverse nature of the family, cultural influences, high risk families, alternative families, and children with special needs. This course is designed for both parents and teachers.

**Child Development 107**
(formerly Child Development 7)

**Infant/Toddler Development**

3 units; 3 hours lecture 
Prerequisite: Child Development 103 with a minimum grade of C 
Credit, degree applicable 
Transfer CSU

This course focuses on factors affecting the physical, cognitive and psychosocial development of a child from birth to age two-and-a-half. Topics include the effect of the adult-child relationship on an infant's development, practical application of developmental theories in relation to infant/toddler group care, dealing sensitively and effectively with cultural issues in the child care setting, developmentally appropriate environments, curriculum, and state mandated licensing regulations.

**Child Development 108**
(formerly Child Development 8)

**The Preschool Child**

3 units; 3 hours lecture 
Prerequisite: Child Development 103 with a minimum grade of C 
Credit, degree applicable 
Transfer CSU

This course analyzes developmental patterns of children from two-and-a-half to five years of age with an emphasis on the practical application of theories and principles of development. The course includes a comparison of historical and current philosophies and methodologies of early childhood education. Topics include observation and analysis of child behavior, identification of effective teaching strategies, age appropriate environments, and professional ethics.
Child Development 110
(formerly Child Development 10)
Child Health and Safety
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 1A
Credit, degree applicable
Transfer CSU
This course is designed to meet the needs of parents, family child care providers and center-based teachers who are interested in increasing their knowledge of health and safety practices for young children. Topics include creating a healthy environment, 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 develop and present health and safety education curriculum appropriate for children, staff and parents.

Child Development 111
(formerly Child Development 11)
Pediatric First Aid and CPR
1 unit; 1 hour lecture
Recommended Preparation:
Child Development 110
Credit, degree applicable
Transfer CSU
This course offers students certification in pediatric cardio pulmonary resuscitation (CPR) and first aid, which includes, but is not limited to, the assessment and interpretation of emergency situations and safe responses to those situations. Students will learn the proper methods for the control of bleeding and shock, maintenance of airways, breathing and circulation, the care of burns, frostbite, poisonings and other first aid techniques.

Child Development 112
(formerly Child Development 12)
Teaching Young Children in a Diverse Society
3 units; 3 hours lecture
Prerequisite: Child Development 103 with a minimum grade of C or concurrent enrollment
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.

Child Development 114
(formerly Child Development 34)
Observing and Guiding Children
3 units; 3 hours lecture
Prerequisite: Child Development 103 with a minimum grade of C or equivalent
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 five. 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. The course is designed for teachers in training and teachers in service needing to develop or refine skills in planning and implementing art curriculum.

Child Development 116
(formerly Child Development 16)
Creative Art for Young Children
3 units; 3 hours lecture
Prerequisite: Child Development 103 with a minimum grade of C or equivalent or concurrent enrollment
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 five. 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 or refine skills in planning and implementing art curriculum.

Child Development 117
(formerly Child Development 17)
Music and Movement for Young Children
3 units; 3 hours lecture
Prerequisite: Child Development 103 with a minimum grade of C or equivalent or concurrent enrollment
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 five. 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. The course is designed for teachers in training and teachers in service needing to develop or refine skills in planning and implementing art curriculum.

*Some UC transferable courses have credit limitations.
For details, see a counselor, the Transfer Center advisor, or the articulation officer.
Child Development 118  
(formerly Child Development 18)  
**Science and Math for Young Children**  
3 units; 3 hours lecture  
Prerequisite: Child Development 103 with a minimum grade of C or equivalent or concurrent enrollment  
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 five. 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 planning and implementing science and math curriculum.

Child Development 119  
(formerly Child Development 19)  
**Language Arts for Young Children**  
3 units; 3 hours lecture  
Prerequisite: Child Development 103 with a minimum grade of C or equivalent or concurrent enrollment  
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 five. Appropriate activities for expressive and receptive language development, such as story telling, 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.

Child Development 122  
(formerly Child Development 45)  
**Development of the School Age Child**  
3 units; 3 hours lecture  
Prerequisite: Child Development 103 with a minimum grade of C or concurrent enrollment  
Credit, degree applicable  
Transfer CSU  
This course focuses on the principles of middle childhood which spans the ages of five through fourteen. Emphasis is placed on the interrelationship between the physical, cognitive, and social/emotional domains of development. Topics include family, school, community, diversity, and special needs as they relate to the healthy development of school age children. This course also examines current developmental trends specific to middle childhood. Students will conduct observations in programs that serve school age children.

Child Development 123  
(formerly Child Development 46)  
**Principles and Practices of School Age Care Programs**  
3 units; 3 hours lecture  
Prerequisite: Child Development 103 with a minimum grade of C or concurrent enrollment  
Credit, degree applicable  
Transfer CSU  
This course focuses on the principles and methods of planning, implementing, and evaluating school age programs. The standards for developmentally appropriate practices and effective methods of guiding behavior will be examined. Topics will include adult/child relationships, diversity, environmental assessments, family and community involvement, career opportunities, and issues of advocacy as they relate to out-of-school programs. Students will develop and evaluate curriculum in the areas of math, science, creative arts, music, language arts, community service, and physical education. In addition, students will conduct observations in programs that serve school age children.

Child Development 125  
**Child Development Practicum I**  
3 units; 2 hours lecture, 3 hours lab to be arranged  
Prerequisite: Child Development 103, 104 and one course from Child Development 116, 117, 118 or 119 with a minimum grade of C in each prerequisite course  
Credit, degree applicable  
Transfer CSU  
This course provides a practical application of learning theories in early childhood education programs. Students will have an opportunity to 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. This course is designed for teachers in training and teachers in service who want to develop or refine their skills.

Child Development 126  
(formerly Child Development 20)  
**Child Development Practicum II**  
3 units; 2 hours lecture, 3 hours lab to be arranged  
Prerequisite: Child Development 104, 108, 150 and two courses from Child Development 116, 117, 118, 119 with a minimum grade of C in each prerequisite course. 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. 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. This course is designed for teachers in training and teachers in service who want to develop or refine their skills.

The hours per week of courses may be adjusted based on the length of the term.
Child Development 129
(formerly Child Development 29)
Introduction to Program
Administration
3 units; 3 hours lecture
Credit, degree applicable
Transfer CSU
This course focuses on the regulations, standards and practices for licensed preschool programs established by the California State Department of Social Services. Topics include the role of the program director, interpersonal relationships, public relations, staff recruitment and selection, and community resources.

Child Development 130
(formerly Child Development 30)
Principles of Program
Administration
3 units; 3 hours lecture
Prerequisite: Child Development 126 with a minimum grade of C 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 will include legislative policies, fiscal management, leadership, and professionalism. Effective communication with early childhood staff and strategies for working with parents will also be discussed.

Child Development 131
(formerly Child Development 31)
Supervising and Mentoring Adults
2 units; 2 hours lecture
Enrollment Limitation: current or past experience in an early childhood program
Credit, degree applicable
Transfer CSU
In this course students will study the principles and practices of supervising and evaluating staff in early childhood education programs. Emphasis will be placed on the role and responsibilities of experienced classroom teachers who mentor or supervise new teachers and student teachers. Topics will include balancing the needs of children, families and staff, ethics, advocacy, and professionalism in the field.
Note: This course fulfills the adult supervision requirement for the Child Development Permit and the California Early Childhood Mentor Teacher Program.

Child Development 137abcd
(formerly Child Development 37abcd)
Mentor Seminar A
0.5 unit; 2.5 hours lecture (4 weeks course)
Enrollment Limitation: current or past experience in an early childhood program
Credit, degree applicable
This course is designed to provide information, guidance and peer support for mentor teachers who are supervising student teachers, beginning teachers and assistants in early childhood education programs. Seminar content will be individualized to meet the professional needs of each mentor. This course meets the professional development requirements for renewal of the Child Development Permit.

Child Development 138abcd
(formerly Child Development 38abcd)
Mentor Seminar B
0.5 unit; 2.5 hours lecture (4 weeks course)
Enrollment Limitation: current or past experience in an early childhood program
Credit, degree applicable
This course is designed for early childhood mentor teachers to further explore issues introduced in Mentor Seminar A. Content relates to the role mentoring student teachers, beginning teachers, and assistants in early childhood programs. Additional emphasis will be placed on the role of early childhood professionals. Seminar content will be individualized to meet the needs of each mentor. This course meets professional development requirements for the renewal of the Child Development Permit.

Child Development 139abcd
(formerly Child Development 39abcd)
Mentor Seminar C
0.5 unit; 2.5 hours lecture (4 weeks course)
Enrollment Limitation: current or past experience in an early childhood program
Credit, degree applicable
This course is designed for early childhood mentor teachers to further explore issues presented in Mentor Seminar B. Content relates to the role of mentoring student teachers, beginning teachers and assistants in early childhood programs. Additional emphasis will be placed on the role of early childhood educators as advocates and change agents. Seminar content will be individualized to meet the needs of each mentor. This course meets professional development requirements for the renewal of the Child Development Permit.

Child Development 140abcd
(formerly Child Development 40abcd)
Mentor Seminar D
0.5 unit; 2.5 hours lecture (4 weeks course)
Enrollment Limitation: current or past experience in an early childhood program
Credit, degree applicable
This course is designed for early childhood mentor teachers to further explore issues discussed in Mentor Seminar C. Content relates to the role of mentoring student teachers, beginning teachers and assistants in early childhood programs. Additional emphasis will be placed on research and communication. Seminar content will be individualized to meet the needs of each mentor. This course meets professional development requirements for the renewal of the Child Development Permit.

Child Development 150
(formerly Child Development 4)
Survey of Children with Special Needs
3 units; 3 hours lecture
Prerequisite: Child Development 103 with a minimum grade of C or concurrent enrollment
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. 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. Students will observe local programs that serve children with special needs.

Child Development 152
(formerly Child Development 32)
Disabilities in the Developing Child
3 units; 3 hours lecture
Recommended Preparation: eligibility for English A
Credit, degree applicable
Transfer CSU
In this course students will study childhood disabilities, the effects of these conditions on the child’s development, and the overall impact on the family system. Topics include typical and atypical development in the physical, cognitive, social, and emotional domains as well as the recognition, treatment, and care for children with disabling conditions. Students will also explore the role and responsibilities of the classroom special education assistant and the in-home respite care provider.
Note: This course is the same as Nursing 116.

The hours per week of courses may be adjusted based on the length of the term.
Child Development 154  
(formerly Child Development 33)  
**Role and Responsibilities of the Special Education Assistant**  
3 units; 3 hours lecture  
Recommended Preparation: eligibility for English A  
Credit, degree applicable  
Transfer CSU  
This course introduces students to the role and responsibilities of the special education assistant. Students will examine effective communication and problem solving techniques; the disabilities that qualify a child for special education consideration; legal and ethical issues; and methods of adapting the environment and equipment to meet the needs of the children. Students will also examine the role of specialists who work with children with disabilities and observe in classrooms that serve children with special needs.

Child Development 160  
**Working with Children: Autism Spectrum Disorders**  
1 unit; 1 hour lecture  
Recommended Preparation: Child Development 150 or 152  
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 and related disorders. Students will be introduced to the social, emotional, cognitive, and academic needs of these children. The characteristics of effective teaching 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 will observe local programs that serve children with autism and related disorders.

Child Development 163  
**Working with Children: Attention Deficit Disorders**  
1 unit; 1 hour lecture  
Recommended Preparation: Child Development 150 or 152  
Credit, degree applicable  
Transfer CSU  
This course is designed for students interested in working as a paraprofessional with children who have been diagnosed with Attention Deficit Disorder (ADD) or Attention Deficit Hyperactivity Disorder (ADHD). The causes, signs, symptoms, treatment, and implications of these disorders as well as 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 will observe local programs that serve children with ADD or ADHD.

Child Development 166  
**Working with Children: Physical Disabilities/Health Impairments**  
1 unit; 1 hour lecture  
Recommended Preparation: Child Development 150 or 152  
Credit, degree applicable  
Transfer CSU  
This course is designed for students interested in working as paraprofessionals with children with physical disabilities and/or health conditions. Common physical disabilities such as cerebral palsy and spina bifida and other health impairments such as asthma and diabetes will be examined. Students will be introduced to the various types of medical and technological support required for these children during the school day and in the home. Topics will include procedures, equipment, health and safety issues, and the laws governing the rights of children with special needs and their families. Students will observe local programs that serve children with physical impairments or health conditions.

Child Development 169  
**Special Education Practicum**  
3 units; 2 hours lecture, 3 hours lab to be arranged  
Prerequisite: Child Development 150 or 152; Child Development 104, 107, 108, and 110; Child Development 116 or 117 or 118 or 119 with minimum grade of C in prerequisite or equivalent  
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.

Child Development 170A  
**Family Development I**  
3 units; 3 hours lecture  
Credit, degree applicable  
Transfer CSU  
This is the first course in a two-course professional development series. It is designed for front line family workers who help families work through crises and transitions in their lives. Students will develop and practice skills needed to provide strengths-based support for families in their communities. Topics will include the core principles of the family development approach, communication and assessment techniques, understanding and appreciating diversity and culture, and the development of Family Development Plans. Students will begin development of a portfolio to document their ability to assist families in achieving long-term sustained change. Upon successful completion of Child Development 170A and 170B, students will become eligible to apply for a Family Development Credential.

*Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center advisor, or the articulation officer.*
Chinese 21ab
**Beginning Conversational Chinese**
2 units; 2 hours lecture
Prerequisite: Chinese 1 with minimum grade of C or equivalent
Credit, degree applicable
Transfer CSU, UC
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.

Chinese 22ab
**Intermediate Conversational Chinese**
2 units; 2 hours lecture
Prerequisite: Chinese 2 and Chinese 21ab 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.

Chinese 24
**Introduction to Chinese Language and Culture**
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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.

Chinese 99abc
**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 - limitations apply
This course provides special 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 (60 hours per unit).

Note: Refer to page 11 of this Catalog for eligibility requirements.

*Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center advisor, or the articulation officer.
Communication Studies – A.A. Degree

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.

El Camino College Major Requirements
At least 12 units must be completed at El Camino College.
Communication Studies 1, 4;
a minimum of 16 units from: Communication Studies 3, 5, 6abcd, 7, 8, 9, 11, 12, 14, 22abcd, 23abcd, 24abcd, 25abcd
Total Units: 22

Preparation for the 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.

Communication Studies 5
(formerly Speech Communication 5)
Mass Communication
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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 Speech Communication 5 and Journalism 12 is one course.

Communication Studies 6abcd
Student Leadership
2 units; 1 hour lecture, 2 hours lab to be arranged
Recommended Preparation: eligibility for English 84
Credit, degree applicable
Transfer CSU

This course provides skill building in the areas of time management, goal setting, and listening as they pertain to leadership positions. It also provides education in parliamentary procedure, group dynamics, democratic procedures, and the mechanics of group processes.

Communication Studies 9
(formerly Speech Communication 9)
Readers Theatre
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 1A
Credit, degree applicable
Transfer CSU, UC

This course introduces students to the medium of readers theatre. Students will evaluate, analyze, synthesize, and perform a variety of different texts for the purpose of creating, staging, and performing a readers theatre. Emphasis is placed on experimental presentations and the development of analytical insight into literary forms.

Communication Studies 11
Organizational Communication
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 1A
Credit, degree applicable
Transfer CSU

This course examines the role of communication in achieving goals of an organization. Emphasis is placed on the theories and practices of communication that contribute to productivity and efficiency in private and public organizations. Topics will include internal and external communication, interpersonal and group processes, and international communication.

Communication Studies 12
(formerly Speech Communication 12)
Interpersonal Communication
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 1A
Credit, degree applicable
Transfer CSU

In this course students study and apply methods and theories of interpersonal communication such as self-concept, perception, emotions, language and gender differences, non-verbal communication, listening, intimacy, defensiveness, and conflict resolution. Students are required to give formal and informal oral presentations and write reports.

Communication Studies 14
(formerly Speech Communication 14)
Introduction to Intercultural Communication
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 1A
Credit, degree applicable
Transfer CSU

This course examines general communication principles and cross-cultural communication styles, and presents in-class activities to enhance cross-cultural communication.
Communication Studies 22abcd
Forensics – Individual Events
2 units; 1 hour lecture, 3 hours lab
Recommended Preparation: eligibility for English 1A
Enrollment Limitation: audition
Credit, degree applicable
Transfer CSU
This course provides training for individual forensics events for intercollegiate speech competition. 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.

Communication Studies 23abcd
Forensics – Team Events
2 units; 1 hour lecture, 3 hours lab
Recommended Preparation: eligibility for English 1A
Enrollment Limitation: audition
Credit, degree applicable
Transfer CSU
This course provides Team Forensics events training for intercollegiate speech competition. 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.

Communication Studies 24abcd
(formerly Speech Communication 24abcd)
Forensic Workshop
1 unit; 3 hours lab
Credit, degree applicable
Transfer CSU
Students will be introduced to competitive public speaking, including debate, platform speeches, limited-preparation speaking, and oral interpretation of literature. Students will have the opportunity to observe and participate in forensic competitions.

Communication Studies 25abcd
(formerly Speech Communication 25abcd)
Forensic Team
1 unit; 3 hours lab
Enrollment Limitation: audition
Credit, degree applicable
Transfer CSU
This course provides instruction, rehearsal, and preparation for intercollegiate forensic competition. Students must audition to become members of the forensic team. Competition at forensic tournaments is based upon skill and preparation.

Communication Studies 50
(formerly Speech Communication 50)
Special Topics in Communication Studies Communication
Units determined by individual course; lecture/lab hours determined by individual course
Credit status determined by individual course
This course is designed to explore topics in Speech Communication more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

Communication Studies 99abc
(formerly Speech Communication 99abc)
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, UC - limitations apply
This course provides special advanced studies in a subject field of Speech Communication not covered in the regular departmental offerings. Regular conferences with the instructor will be assigned with assigned Speech Communication projects (60 hours per unit).
Note: Refer to page 11 of this Catalog for eligibility requirements.

Computer Aided Design/Drafting

Computer Aided Design/Drafting 10abcd
Wireframe with Surfaces, Solid Modeling and Assemblies
3 units; 2 hours lecture, 4 hours lab
Recommended Preparation: Computer Aided Design/Drafting 5 or one year of high school drafting or industry experience
Credit, degree applicable
Transfer CSU, UC
In this course students create three-dimensional (3-D) wireframe and surfaced models, solid models, assembly and two-dimensional (2-D) drawings. Models or assemblies are displayed on a 2-D drawing format and orthographically projected with dimensions added. Shading, rendering and solid model modification is also available in the 2-D mode. Auxiliary, detail and section views are also created with such commands as Solview and Soldraw.

Computer Aided Design/Drafting 28abcd
Advanced Parametric Solid Modeling and Assemblies
2 units; 1 hour lecture; 3 hours lab
Prerequisite: Computer Aided Design/Drafting 10abcd with a minimum grade of C or equivalent
Credit, degree applicable
Transfer CSU
In this course, students will dimension orthographic two-dimensional (2-D) drawings with detail, auxiliary, and section views. Also, exploded animated assemblies (kinematics) will be created in this class using Inventor Pro software, an Autodesk product.

Computer Aided Design/Drafting 31abcd
Orientation to CATIA
2 units; 1 hour lecture, 3 hours lab
Recommended Preparation: Computer Aided Design/Drafting 5 or equivalent; eligibility for English 84
Credit, degree applicable
Transfer CSU
This course provides an orientation to and an overview of the CATIA* CAD/CAM system. [*CATIA is a registered trademark of Dassault Systems.] 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 wire frame profiles created on sketch planes. Basic assemblies and basic drafting techniques are also covered.
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 draftsperson in mechanical, electronic, or related industrial fields.

El Camino College Major Requirements
At least 50% of the major requirements for the Associate in Science Degree must be completed at El Camino College.

Computer Aided Design/Drafting 5, 10abcd*, 28abcd*, 31abcd*, 32abcd*, 33abcd*, 37abcd*, 45, 47, 49, Technical Mathematics 1;
one course from: Electronics and Computer Hardware Technology 11, 22, Machine Tool Technology 16ab, 46, 101abcd, Welding 15ab*, Art 141abcd*, 144abcd*, Computer Information Systems 13 [*one semester]
Total Units: 31-32

Certificate of Achievement
A Certificate of Achievement will be granted upon completion of the courses listed below. At least 50% of the courses required for the Certificate of Achievement must be completed at El Camino College.

Computer Aided Design/Drafting 5, 10abcd*, 28abcd*, 31abcd*, 32abcd*, 33abcd*, 37abcd*, 45, 47, 49, Technical Mathematics 1;
one course from: Electronics and Computer Hardware Technology 11, 22, Machine Tool Technology 16ab, 46, 101abcd, Welding 15ab*, Art 141abcd*, 144abcd*, Computer Information Systems 13, 20, 22 [*one semester]
Total Units: 31-32

Certificate of Accomplishment
A Certificate of Accomplishment will be granted upon completion of the courses listed below.
AutoCAD Mechanical Drafting Trainee:
Computer Aided Design/Drafting 5, 10abcd* [*one semester]
Total Units: 6

Computer Aided Design/Drafting – A.S. Degree and Certificates of Achievement and Accomplishment

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 draftsperson in mechanical, electronic, or related industrial fields.

El Camino College Major Requirements
At least 50% of the major requirements for the Associate in Science Degree must be completed at El Camino College.

Computer Aided Design/Drafting 5, 10abcd*, 28abcd*, 31abcd*, 32abcd*, 33abcd*, 37abcd*, 45, 47, 49, Technical Mathematics 1;
one course from: Electronics and Computer Hardware Technology 11, 22, Machine Tool Technology 16ab, 46, 101abcd, Welding 15ab*, Art 141abcd*, 144abcd*, Computer Information Systems 13 [*one semester]
Total Units: 31-32

Certificate of Achievement
A Certificate of Achievement will be granted upon completion of the courses listed below. At least 50% of the courses required for the Certificate of Achievement must be completed at El Camino College.

Computer Aided Design/Drafting 5, 10abcd*, 28abcd*, 31abcd*, 32abcd*, 33abcd*, 37abcd*, 45, 47, 49, Technical Mathematics 1;
one course from: Electronics and Computer Hardware Technology 11, 22, Machine Tool Technology 16ab, 46, 101abcd, Welding 15ab*, Art 141abcd*, 144abcd*, Computer Information Systems 13, 20, 22 [*one semester]
Total Units: 31-32

Certificate of Accomplishment
A Certificate of Accomplishment will be granted upon completion of the courses listed below.
AutoCAD Mechanical Drafting Trainee:
Computer Aided Design/Drafting 5, 10abcd* [*one semester]
Total Units: 6

Computer Aided Design/Drafting 32abcd

Product Modeling with CATIA
2 units; 1 hour lecture, 3 hours lab
Prerequisite: Computer Aided Design/Drafting 31abcd with a minimum grade of C or equivalent
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.

Certificate of Accomplishment
A Certificate of Accomplishment will be granted upon completion of the courses listed below.
AutoCAD Mechanical Drafting Trainee:
Computer Aided Design/Drafting 5, 10abcd* [*one semester]
Total Units: 6

Computer Aided Design/Drafting 33abcd

Analyses and Simulations with CATIA
2 units; 1 hour lecture, 3 hours lab
Prerequisite: Computer Aided Design/Drafting 31abcd with a minimum grade of C or equivalent
Credit, degree applicable
Transfer CSU

This course covers the Functional Dimension and Tolerance (FD&T) aspects of the CATIA software as well as the "knowledgeware," kinematic analysis, generative stress analysis and other Computer Aided Engineering (CAE) functions. [*CATIA is a registered trademark of Dassault Systems.] Special emphasis is placed on surfacing functions.

Certificate of Accomplishment
A Certificate of Accomplishment will be granted upon completion of the courses listed below.
AutoCAD Mechanical Drafting Trainee:
Computer Aided Design/Drafting 5, 10abcd* [*one semester]
Total Units: 6
Computer Aided Design/Drafting 49
Advanced Two Dimensional Mechanical Computer Aided Design/Drafting
3 units; 2 hours lecture, 4 hours lab
Prerequisite: one semester of Computer Aided Design/Drafting 10abcd with a minimum grade of C or equivalent
Credit, degree applicable
Transfer CSU, UC
This is an advanced course in design and drafting exploring orthographic projection, dimensioning, tolerancing, sketching, oblique planes, assembly drawings, manufacturing processes, hardware selection and raw materials. Design practices of industry are stressed and required of each student. Students will work in teams to complete a design drawing package including concept, layout, detail and assembly drawings. Research, planning and sketching are done manually while all formal drawings are done on a personal computer with appropriate computer aided drafting (CAD) software.

Computer Aided Design/Drafting 50
Special Topics in Computer Aided Design/Drafting
Units determined by individual course; lecture/lab hours determined by individual course
Credit status determined by individual course
This course is designed to explore topics in Computer Aided Design/Drafting more specific than provide in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

Computer Aided Design/Drafting 95abcd
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 - limitations apply
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 CWEE may not exceed 16 units.

Computer Aided Design/Drafting 99abc
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 - limitations apply
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 (60 hours per unit).
Note: Refer to page 11 of this Catalog for eligibility requirements.

Computer Information Systems

Computer Information Systems 3
Introduction to Microcomputer and Software Applications
1 unit; 0.5 hour lecture, 1 hour lab
Credit, not degree applicable
In this course the student is introduced to the capabilities of the microcomputer using word processing and spreadsheets in a hands-on environment. Operation of the microcomputer as a general purpose tool will be stressed.
Note: Letter grade or P/NP option.

Computer Information Systems 11
Help Desk Operations
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 19
Credit, degree applicable
Transfer CSU
This course focuses on practical applications related to the process of help desk and end-user support in the field of Information Technology in a variety of organizational settings. Topics include the end-user support function in an organization, techniques to resolve various help desk issues, and strategies to provide ongoing technical support to end-users. Emphasis will be placed on problem solving with users, needs analysis, troubleshooting, and interaction with users.
Note: Letter grade or P/NP option.

Computer Information Systems 13
Introduction to Computers
3 units; 2 hours lecture, 3 hours lab
Recommended Preparation: eligibility for English 84
Credit, degree applicable
Transfer CSU, UC
This course is an introduction to computers and application software. It is designed as both an introduction and an entry-level overview for other Computer Information Systems classes. The class covers operating systems, computer security, application software, and hardware. Laboratory exercises focus on application software including spreadsheets, word processors, databases, presentation tools, and the use of the Internet. A programming language is used to teach design and logic.

Computer Hardware Technology
See Electronics and Computer Hardware Technology
This course is an introduction to program-
ing. Students will learn how to design and flow charts will then be created and Object Event (TOE) charts. Pseudocode interfaces and how to develop Task of code will be written for the various con-
sequent file access, arrays, and database controls on the interface. Topics such as
feasibility study, analysis, process model-
ing, data modeling, logic modeling, soft-
ware development choices, and implemen-
tation and maintenance of systems.

El Camino College Major Requirements
Computer Information Systems 13, 18, 19; one of the following groups: Computer Information Systems 26 and 28 OR 140 and 141; two of the following courses: Computer Information Systems 16, 27, 29, 30, 80, 133, 134, 142, 143
Total Units: 21-22

Certificates of Achievement
Microcomputer Applications: A minimum of 12 Computer Information Systems units must be completed at El Camino College and a grade point average of 3.0 [B] is necessary in the required 30-34 units.
Computer Information Systems 18
Prerequisite: Computer Information Systems 13; Computer Information Systems 26 or 28 with a minimum grade of C in prerequisite or equivalent experience
Credit, degree applicable
Transfer CSU, UC

This course is an introduction to program-
ing. Students will learn how to design interfaces and how to develop Task of Object Event (TOE) charts. Pseudocode and flow charts will then be created and code will be written for the various controls on the interface. Topics such as sequential file access, arrays, and database access will be covered.

The hours per week of courses may be adjusted based on the length of the term.
Computer Information Systems 28
**Using Database Applications**
3 units; 2 hours lecture, 3 hours lab
Recommended Preparation: Computer Information Systems 13 or equivalent experience
Credit, degree applicable
Transfer CSU
This course offers the student advanced instruction in relational databases in a Windows environment. The student designs and develops a database from user specifications. Topics include analyzing source documents, normalizing a database, techniques of effective design and creating and implementing all tables and database objects. Applications used are typical business operations such as inventory and human resources.

Computer Information Systems 29
**Advanced Database Applications**
3 units; 2 hours lecture, 2 hours lab
Prerequisite: Computer Information Systems 28 with a minimum grade of C
Credit, degree applicable
Transfer CSU
This course offers the student advanced instruction in relational databases in a Windows environment. The student designs and develops a database from user specifications. Topics include analyzing source documents, normalizing a database, techniques of effective design and creating and implementing all tables and database objects. Applications used are typical business operations such as inventory and human resources.

Computer Information Systems 30
**Introduction to eCommerce**
3 units; 2 hours lecture, 3 hours lab
Recommended Preparation: Computer Information Systems 13; eligibility for English 84
Credit, degree applicable
Transfer CSU
This introductory course will acquaint the student with fundamentals of eCommerce. 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 masters, website designers, and eCommerce business managers.

Note: Letter grade or P/NP option.

Computer Information Systems 40
**Microcomputer Operations**
3 units; 2 hours lecture, 3 hours lab
Recommended Preparation: Computer Information Systems 13 plus one other microcomputer course or equivalent experience
Credit, degree applicable
Transfer CSU, UC
In this course students will become familiar with managing and supporting microcomputers within an organization. The class will emphasize both computer hardware and applications software. Topics covered will include microcomputer concepts, computer devices, hardware management, applications and operating system software installation and setup, and ethical concerns within the information systems environment.

Computer Information Systems 50
**Special Topics in Computer Information Systems**
Units determined by individual course; lecture/laboratory hours determined by individual course
Credit status determined by individual course
This course is designed to explore topics in Computer Information Systems more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

Computer Information Systems 80
**Oracle Application Programming**
4 units; 3 hours lecture, 2 hours lab
Prerequisite: Computer Information Systems 28 with a minimum grade of C or equivalent experience in database design
Credit, degree applicable
Transfer CSU
The effective and efficient use of an application programming language is introduced and developed in lectures and reinforced through a series of lab projects of increasing complexity. Programming techniques will include building and manipulation of tables as used in modern business.

Computer Information Systems 95/96abcd
**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 - limitations apply
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: The total units earned for CWEE may not exceed 16 units.

Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center advisor, or the articulation officer.
Computer Information Systems 133
Web Programming Concepts
4 units; 3 hours lecture, 3 hours lab
Recommended Preparation: Computer Information Systems 13 or Computer Information Systems 19 or equivalent experience
Credit, degree applicable
Transfer CSU
Students examine the fundamental concepts and structures of programming for the Web using client-side mark-up languages and scripting languages. Students learn how to use standard documentation, testing and debugging techniques, and Web-based programming tools such as conditional structures, variables, classes, objects, functions, events, arrays, windows, and forms in order to create eBusiness applications. Additional topics include the introduction to XML, databases as used in the development of Web-based programming, and utilizing Web services.
Note: Letter grade or P/NP option.

Computer Information Systems 134
Web Programming
4 units; 3 hours lecture, 3 hours lab
Recommended Preparation: Computer Information Systems 133 or equivalent experience
Credit, degree applicable
Transfer CSU
This introductory programming course incorporates the basic concepts of Web programming, problem solving, programming logic, and design techniques using Microsoft.Net Web programming languages. The student will be able to obtain information from an e-client and send information to the e-client by building dynamic data-driven Web applications. Skills will be applied to the creation of a Web Service. Emphasis is placed on emerging Web programming skills and technologies to prepare students for advanced programming applications and to enter the eBusiness industry.
Note: Letter grade or P/NP option.

Computer Information Systems 140
Data Communications Cisco 1
3 units; 2 hours lecture, 2 hours lab
Prerequisite: Computer Information Systems 13 with a minimum grade of C or equivalent experience
Recommended Preparation: Computer Information Systems 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.

Computer Information Systems 141
Networking Microcomputers Cisco 2
3 units; 2 hours lecture, 2 hours lab
Prerequisite: Computer Information Systems 140 with a minimum grade of C or equivalent
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 2 in the Cisco Networking Academy program.

Computer Information Systems 142
Implementing and Administering Network Routers Cisco 3
3 units; 2 hours lecture, 2 hours lab
Prerequisite: Computer Information Systems 141 with a minimum grade of C or equivalent (Successful completion of Cisco CCNA “semesters” 1 and 2 is an equivalent.)
Credit, degree applicable
Transfer CSU
This course provides instruction in installing and maintaining network routers. The course will provide hands-on experience in diagnosing and replacing router components.
Note: Letter grade or P/NP option.

Computer Information Systems 143
LAN and WAN Router Configurations Cisco 4
3 units; 2 hours lecture, 2 hours lab
Prerequisite: Computer Information Systems 142 with a minimum grade of C or equivalent (Successful completion of Cisco CCNA “semesters” 1, 2, and 3 is an equivalent.)
Credit, degree applicable
Transfer CSU
This course provides a study of routers and their configuration in multi-protocol inter-networks. Students will learn to design and build a multi-router and multi-group inter-network that use local and wide area network interfaces for the most commonly used routing and routed protocols.
Note: Letter grade or P/NP option.

The hours per week of courses may be adjusted based on the length of the term.
Computer Related Programs

El Camino College offers courses in computer applications in industry, Computer Information Systems, and Computer Science.

Computer Applications in Industry

The Industry and Technology Division offers a number of courses in computer applications in industry and computer technology. From design and drafting to machine tools controlled by computers, each course is designed to prepare the student for employment with the skills and techniques needed for today’s competitive workplace. Refer to Computer Aided Design/Drafting and Machine Tool Technology for course listings. For those interested in the internal workings of computer hardware technology, refer to the many related courses in Electronics and Computer Hardware Technology.

Computer Information Systems

The Business Division offers Computer Information Systems courses for students interested in a Computer Information Systems Associate in Science degree or Certificate of Achievement, transfer to a four-year school, and career placement or advancement. At four-year institutions, these courses may be listed under the following headings: Computer Information Systems, Information Systems or Management Information Systems. The courses offered cover major commercial programming languages such as Oracle and Visual Basic.Net and application packages such as EXCEL, Word, Access, and FrontPage. The hardware used includes various PC microcomputer systems. Students desiring a knowledge of information processing systems as a programmer, analyst, computer operator, application software user, or for transfer to a four-year college/university should refer to the course listings under the Computer Information Systems section of this catalog. The introductory level course is Computer Information Systems 13.

Computer Science

The Mathematical Sciences Division offers Computer Science courses which are designed primarily for students who wish to transfer to a four-year institution with a major in Computer Science, Physics, Mathematics, Engineering, or another technical major which will be concerned with the study or application of computer concepts. The courses offered provide instruction in high-level languages such as PASCAL, FORTRAN, and C++; PC assembly languages, and advanced programming concepts. It should be noted that most Computer Science courses have a mathematics prerequisite. Refer to the course listings in the Computer Science section of this catalog and the schedule of classes for specific information.

Computer Science 1

Problem Solving and Program Design Using C++

4 units; 3 hours lecture, 3 hours lab
Prerequisite: Mathematics 170 with a minimum grade of C
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 nonnumeric 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.

Computer Science 2

Introduction to Data Structures

5 units; 4 hours lecture, 3 hours lab
Prerequisite: Computer Science 1 with a minimum grade of C
Recommended Preparation: Mathematics 190
Credit, degree applicable
Transfer CSU, UC

In this course, the C++ computer language is used to demonstrate methods of representing and manipulating data. 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.

Computer Science 3

Computer Programming in Java

4 units; 3 hours lecture, 3 hours lab
Prerequisite: Computer Science 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.

Note: This course is only offered in the fall semester.

Computer Science 4

Computer Science Programming in C#

4 units; 3 hours lecture, 3 hours lab
Prerequisite: Computer Science 1 with a minimum grade of C or equivalent
Credit, degree applicable
Transfer CSU, UC

This course will introduce the student to the C# (C Sharp) computer programming language and the .NET framework. Students will write computer science programs using the C# language. Associated topics in the .NET framework will also be covered.

Computer Science 10

Computer Programming with FORTRAN

4 units; 3 hours lecture, 3 hours lab
Prerequisite: Mathematics 190 with a minimum grade of C or concurrent enrollment
Credit, degree applicable
Transfer CSU, UC

This course is an introduction to elementary numerical methods using the FORTRAN Language. Topics include algebraic equation solvers, numerical differentiation and integration, evaluation of determinants, matrix solutions of linear systems of equations, and prime number generators. Laboratory work is conducted on IBM compatible personal computers.

Note: You must have satisfied the course prerequisite at El Camino College or another accredited college. A transcript or grade slip is required for verification of a grade from another college.

Note: This course is only offered in the fall semester.

The hours per week of courses may be adjusted based on the length of the term.

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By completing the degree or certificate requirements, the student will apply program design principles and will acquire an understanding of data structures and their applications for an analysis and solution of numeric and non-numeric problems. The student will write programs using the C, C++, and assembly computer languages. All courses have a mandatory computer laboratory component requiring students to apply knowledge of the concepts from the lecture. Competencies are assessed regularly through examinations in the lecture component and through evaluation of computer laboratory activities.

Certificate of Achievement
A Certificate of Achievement will be granted upon completion of the course requirements. At least 16 units required for the certificate must be completed at El Camino College. Computer Science 1, 2; three courses from: Computer Science 3, 4, 10, 30, 40, 60, Mathematics 210
Total Units: 21

Preparation for the 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 Science 30
Advanced Programming in C++
4 units; 3 hours lecture, 3 hours lab
Prerequisite: Computer Science 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.

Note: This course is only offered in the spring semester.

Computer Science 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 P/NP option.

Computer Science 50
Special Topics in Computer Science
Units determined by individual course; lecture/lab hours determined by individual course
Credit status determined by individual course
This course is designed to explore topics in Computer Science more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

Computer Science 60
Programming with ASP.NET and C# in Web Based Computer Science Applications
4 units; 3 hours lecture, 3 hours lab
Prerequisite: Computer Science 2, 3, 4 or 30 with a minimum grade of C in prerequisite or equivalent
Credit, degree applicable
Transfer CSU
This course introduces students to Web based programming using ASP.NET, C#, and object-oriented programming. Students will learn ASP.NET’s Web forms, Web controls, custom controls, and data binding. Additional topics include ASP.NET class hierarchy and C# inheritance. In the computer laboratory, students will create computer science Web applications, such as a scientific Web calculator.

Note: The total units earned for CWEE may not exceed 16 units.
Construction Technology – A.S. Degree and Certificates of Achievement

(Industry and Technology Division)

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, cabinet-making, 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.

El Camino College Major Requirements
At least 50% of the major requirements for the Associate in Science degree must be completed at El Camino College.

Construction Technology Option:
Complete the following: Construction Technology 100, 110, 107abcd* (* one semester); a minimum of 24 units from: Architecture 180, Construction Technology 105, 121, 122, 131, 132, 141, 142, 150, 160, 172, 180
Recommended Electives: Architecture 150A, Business 17, Computer Information Systems 13, Construction Technology 95abcd, Technical Mathematics 1
Total Units: 34

Cabinet and Fine Woodworking Option:
Complete the following: Construction Technology 107abcd*, 108abcd*, 109abcd* (*four semesters); one course from: Architecture 150A, Business 17, Computer Aided Design/Drafting 5, Computer Information Systems 13, Construction Technology 95abcd (2-4 units), 100, 110, Machine Tool Technology 13A, Technical Mathematics 1
Total Units: 24-26

Certificates of Achievement
A Certificate of Achievement will be granted upon completion of the required courses in one of the following options, Construction Technology or Cabinet and Fine Woodworking. At least 50% of the courses for the Certificate of Achievement must be completed at El Camino College.

Construction Technology:
Complete the following: Construction Technology 100, 110, 107abcd* (*one semester); a minimum of 24 units from: Architecture 180, Construction Technology 105, 121, 122, 131, 132, 141, 142, 150, 160, 172, 180, 95abcd* (* 2-4 units)
General Requirements: English A or qualifying score for English 1A on English Placement Test, Technical Mathematics 1
Total Units: 37-40

Cabinet and Fine Woodworking:
Complete the following: Construction Technology 107abcd*, 108abcd*, 109abcd* (*four semesters); one course from: Architecture 150A, Business 17, Computer Aided Design/Drafting 5, Computer Information Systems 13, Construction Technology 95abcd (2-4 units), 100, 110, Machine Tool Technology 13A, Technical Mathematics 1
Total Units: 24-26

Construction Technology 99abc
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 - limitations apply
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 (60 hours per unit).
Note: Refer to page 11 of this Catalog for eligibility requirements.

Construction Technology 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.

Construction Technology 105
Residential Light Steel Framing
2 units; 1.25 hours lecture, 3 hours lab
Credit, degree applicable
Transfer CSU
This course is an introduction to the fundamentals of light frame for residential framing. Instruction includes: raised floor construction, wall framing, trussed roof fabrication and installation, and applicable building codes and blueprint reading. The fundamentals are learned through laboratory work which requires the use of standard construction tools and materials.

Construction Technology 107abcd
Cabinet and Furniture Making
2 units; 1 hour lecture, 3 hours lab
Credit, degree applicable
Transfer CSU
This course is the study of the elements of cabinet and furniture design. Properties of wood and wood products, fabrication and installation of house cabinets, and fabrication of furniture will be covered.
Note: Class expenses will be determined by each student’s personal project.
Construction Technology 108abcd
Advanced Cabinet Making Laboratory
1 unit; 3 hours lab
Prerequisite: two semesters of Construction Technology 107abcd with a minimum grade of C or equivalent
Credit, degree applicable
Transfer CSU
This course provides students the opportunity to develop advanced skill levels in the design and fabrication of cabinets. Emphasis is placed on the use of jigs, fixtures and production techniques. The latest hardware and fastening techniques are introduced.
Note: The expense of the class to the student will be determined by the student’s personal project.

Construction Technology 109abcd
Application and Installation of Euro Style Hardware
2.5 units; 1.5 hours lecture, 3 hours lab
Prerequisite: one semester of Construction Technology 107abcd with a minimum grade of C or equivalent
Credit, degree applicable
Transfer CSU
This course covers the principles and operation of hinge mortising line boring machines with emphasis on Euro Style hardware.

Construction Technology 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.

Construction Technology 121
Concrete and Formwork
4 units; 2.5 hours lecture, 5 hours lab
Prerequisite: Construction Technology 100 or 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, use of leveling instruments and estimating. Practical instruction is given in the use of tools and materials through construction laboratory work.

Construction Technology 122
Rough Framing
4 units; 2.5 hours lecture, 5 hours lab
Prerequisite: Construction Technology 100 or 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.

Construction Technology 131
Roof Framing
4 units; 2.5 hours lecture, 5 hours lab
Prerequisite: Construction Technology 100 or 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 rafter systems, International Residential Code (IRC) requirements, roof construction and estimating. Practical instruction is given in the use of tools and materials through construction laboratory work.

Construction Technology 132
Stair Framing
4 units; 2.5 hours lecture, 5 hours lab
Prerequisite: Construction Technology 100 or 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.

Construction Technology 141
Interior Subcrafts
4 units; 2.5 hours lecture, 5 hours lab
Prerequisite: Construction Technology 100 or 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 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.

Construction Technology 142
Exterior Subcrafts
4 units; 2.5 hours lecture, 5 hours lab
Prerequisite: Construction Technology 100 or 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 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.

Construction Technology 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.

*Some UC transferable courses have credit limitations.
For details, see a counselor, the Transfer Center advisor, or the articulation officer.

2010-2011 El Camino College Catalog
Construction Technology 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.

Construction Technology 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 covered include blueprint reading, developing wiring diagrams, wiring, grounding and 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 use of standard electrical tools and materials.

Construction Technology 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.

Contemporary Health

Contemporary Health 1
**Personal and Community Health Issues**

3 units; 3 hours lecture  
Recommended Preparation: eligibility for English A or 84  
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 communicable and non-communicable 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.

Contemporary Health 3
**Drugs and Alcohol in Society**

2 units; 2 hours lecture  
Recommended Preparation: eligibility for English A or 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.

Contemporary Health 50
**Special Topics in Contemporary Health**

Units determined by individual course; lecture/lab determined by individual course  
Credit status determined by individual course  
This course is designed to explore topics in Contemporary Health more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

Contemporary Health 96abcd
**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 - limitations apply  
Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Contemporary Health 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 CWEE may not exceed 16 units.

Contracting

See Construction Technology

*Some UC transferable courses have credit limitations.
For details, see a counselor, the Transfer Center advisor, or the articulation officer.
Cooperative Work Experience Education

Cooperative Work Experience Education (CWEE) is a course designed for students who are looking for upward mobility or possible career changes at their current jobs, as well as those looking for entry-level occupational training through work-based 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 or 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 7 units (including CWEE). Students not enrolled in 7 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 8 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:
- 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.)
- Complete an Application for Cooperative Work Experience Education available in the Division Offices.
- Purchase a Cooperative Work Experience Education Student Handbook from the Student Bookstore. Read the Handbook and complete the Learning Objectives agreement.
- 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.
- Natural Sciences: Available in the area of Environmental Horticulture.

The hours per week of courses may be adjusted based on the length of the term.
Cosmetology – A.S. Degree and Certificates of Achievement and Accomplishment

(Industry and Technology Division)

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.

El Camino College Major Requirements
Completion of a minimum of 35 units (1,600 hours) from the following:
complete 13 units from: Cosmetology 1, 10, 11
complete 13 units from: Cosmetology 2abctl* (*minimum two semesters), 12, 13
complete 9 units from: Cosmetology 2abctl* (*minimum two semesters), 3, 4, 14abcd, 16abcd
Total Units: 35

Certificate of Achievement
A Certificate of Achievement will be granted upon completion of the courses listed below. At least 50% of the courses required for the Certificate of Achievement must be completed at El Camino College.
Cosmetology Level III: Completion of Level I and Level II requirements.
complete a minimum of 8-11 units from:
Cosmetology 2abcd* (*minimum two semesters), 3, 4, 5, 13, 14abcd, 16abcd
Total Units: 35-39

Certificate of Accomplishment
A Certificate of Accomplishment will be granted upon completion of the courses listed below. At least 50% of the courses required for the Certificate of Accomplishment must be completed at El Camino College.
Cosmetology Level I: Completion of at least 500 hours.
complete 13 units from: Cosmetology 1, 10, 11
Total Units: 13

Cosmetology

Cosmetology 1
Introduction to Cosmetology
Procedures
13 units; 6 hours lecture, 30 hours lab
Recommended Preparation: eligibility for English 84
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 workshop in the most common cosmetology processes. Lectures center on the fundamental theories of the practice of cosmetology and their application. Laboratory work is designed to support, with practical application, the basic cosmetology student with an intensive forum for development of basic cosmetology skills, techniques, safety practices, and sanitation procedures.

Note: Students who have earned credit in Cosmetology 10 and 11 cannot receive unit credit for Cosmetology 1.

Cosmetology 2abcd
Advanced Cosmetology
Procedures
6.5 units; 3 hours lecture, 15 hours lab
Prerequisite: Cosmetology 1 with a minimum grade of C or completion of 399 hours at a school licensed by the State Board of Cosmetology
Credit, degree applicable
Transfer CSU
This course covers the principles and practical operations of cosmetology equipment, procedures and techniques. It is designed as an intensive, multi-disciplinary workshop in the most common cosmetology processes. Lectures center on the fundamental theories of the practice of cosmetology and their application. Laboratory work is designed to support the cosmetology student with an intensive forum for development of cosmetology skills, techniques, safety practices and sanitation procedures.

*Some UC transferable courses have credit limitations.
For details, see a counselor, the Transfer Center advisor, or the articulation officer.

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<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>Cosmetology 3</td>
<td>Advanced Cosmetology Applications</td>
</tr>
<tr>
<td>5 units; 4 hours lecture, 28 hours lab [8 weeks course]</td>
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</tr>
<tr>
<td>Prerequisite: Cosmetology 1 with a minimum grade of C or 399 hours from a State approved cosmetology program</td>
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<tr>
<td>Credit, degree applicable</td>
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</tr>
<tr>
<td>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.</td>
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<th>Course Code</th>
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<tbody>
<tr>
<td>Cosmetology 4</td>
<td>Cosmetology Practicum</td>
</tr>
<tr>
<td>0.5 - 10 units; 4.5-90 hours lecture, 13.5-270 hours lab</td>
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<tr>
<td>Prerequisite: Cosmetology 3 or Cosmetology 14 with a minimum grade of C in prerequisite</td>
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<tr>
<td>Credit, not degree applicable</td>
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<tr>
<td>This course is designed for the student who has completed the daytime or evening cosmetology course series and lacks hours for the State Board of Cosmetology examination. The focus of this class is on the advanced principles and practical operations of cosmetology equipment, procedures and techniques.</td>
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<th>Course Code</th>
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<tbody>
<tr>
<td>Cosmetology 5ab</td>
<td>Evening Cosmetology Practicum</td>
</tr>
<tr>
<td>2 Units; 1 hour lecture, 5 hours lab</td>
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<tr>
<td>Prerequisite: Cosmetology 1 or Cosmetology 10 and Cosmetology 11 with a minimum grade of C in each prerequisite course</td>
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<tr>
<td>Credit, degree applicable</td>
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<tr>
<td>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 course is on the advanced principles and practical operations of cosmetology equipment, procedures and techniques.</td>
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<th>Course Code</th>
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<tbody>
<tr>
<td>Cosmetology 10</td>
<td>Introduction to Cosmetology I</td>
</tr>
<tr>
<td>6.5 units; 4 hours lecture, 14 hours lab</td>
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<tr>
<td>Recommended Preparation: eligibility for English 84</td>
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<tr>
<td>Credit, degree applicable</td>
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<tr>
<td>Transfer CSU</td>
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</tr>
<tr>
<td>This is the first of a two-course introductory series covering the principles and practical operations of cosmetology techniques, procedures, and equipment for wet and thermal styling, permanent waving, chemical straightening, hair coloring, and scalp treatments. This is the first course in a sequence of courses that prepares students for the State Board of Cosmetology examination and employment.</td>
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<tbody>
<tr>
<td>Cosmetology 11</td>
<td>Introduction to Cosmetology II</td>
</tr>
<tr>
<td>6.5 units; 4 hours lecture, 14 hours lab</td>
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<tr>
<td>Prerequisite: Cosmetology 10 with a minimum grade of C or equivalent</td>
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<tr>
<td>Credit, degree applicable</td>
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<tr>
<td>Transfer CSU</td>
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<tr>
<td>This is the second of a two-course introductory series covering the principles and practical operations of cosmetology techniques, procedures, and equipment for wet and thermal styling, permanent waving, chemical straightening, hair coloring, scalp treatments, facial treatments, facials, and manicuring and pedicuring. This is the second course in a sequence of courses that prepares students for the State Board of Cosmetology examination and employment.</td>
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<tbody>
<tr>
<td>Cosmetology 12</td>
<td>Intermediate Cosmetology</td>
</tr>
<tr>
<td>6.5 units; 4 hours lecture, 14 hours lab</td>
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<tr>
<td>Prerequisite: Cosmetology 11 with a minimum grade of C</td>
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<tr>
<td>Credit, degree applicable</td>
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<tr>
<td>Transfer CSU</td>
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<tr>
<td>This is an intermediate course covering the principles and practical operations of cosmetology techniques, procedures, and equipment. Topics include wet and thermal styling, permanent waving, chemical straightening, hair coloring, scalp treatments, facial treatments, facials, and manicuring and pedicuring. This is the third course in a sequence of courses that prepares students for the State Board of Cosmetology examination and employment.</td>
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<tbody>
<tr>
<td>Cosmetology 13</td>
<td>Advanced Cosmetology I</td>
</tr>
<tr>
<td>6.5 units; 4 hours lecture, 14 hours lab</td>
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</tr>
<tr>
<td>Prerequisite: Cosmetology 12 with a minimum grade of C</td>
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<tr>
<td>Credit, degree applicable</td>
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<tr>
<td>Transfer CSU</td>
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<tr>
<td>This is the first of a two-course advanced series covering the principles and practical operations of cosmetology techniques, procedures, and equipment. Topics include wet and thermal styling, permanent waving, chemical straightening, hair coloring, scalp treatments, facial treatments, facials, and manicuring and pedicuring. This is the fourth course in a sequence of courses that prepares students for the State Board of Cosmetology examination and employment.</td>
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<tbody>
<tr>
<td>Cosmetology 14abcd</td>
<td>Advanced Cosmetology II</td>
</tr>
<tr>
<td>6.5 units; 4 hours lecture, 14 hours lab</td>
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</tr>
<tr>
<td>Prerequisite: Cosmetology 13 with a minimum grade of C</td>
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<tr>
<td>Credit, degree applicable</td>
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<tr>
<td>Transfer CSU</td>
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<tr>
<td>This is the second of a two-course advanced series covering the principles and practical operations of cosmetology techniques, procedures, and equipment. Topics include wet and thermal styling, permanent waving, chemical straightening, hair coloring, scalp treatments, facial treatments, facials, and manicuring and pedicuring. This is the fifth and final course in a sequence of courses that prepares students for the State Board of Cosmetology examination and employment.</td>
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<tbody>
<tr>
<td>Cosmetology 16abcd</td>
<td>Cosmetology Applications</td>
</tr>
<tr>
<td>3 units; 1.5 hours lecture, 7.5 hours lab</td>
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</tr>
<tr>
<td>Prerequisite: Cosmetology 1 or 10 with a minimum grade of C in prerequisite or equivalent</td>
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<tr>
<td>Credit, degree applicable</td>
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<tr>
<td>Transfer CSU</td>
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</tr>
<tr>
<td>This course covers the study of intermediate principles, procedures, techniques, and practical operations of cosmetology equipment. It is designed as an intensive, multi-disciplinary workshop in the most common cosmetology processes. Lectures center on the theories of the practice of cosmetology and their application. Laboratory work is designed to provide the student with a forum for development of intermediate cosmetology skills, techniques, safety practices and sanitation procedures.</td>
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The hours per week of courses may be adjusted based on the length of the term.

2010-2011 El Camino College Catalog
Cosmetology 103

Introduction to Manicuring Arts
9 units; 3 hours lecture, 18 hours lab
Credit, degree applicable
This course covers the principles of manicuring, artificial nails, nail wraps and nail repairs, spa treatments, reflexology, and paraffin treatments. Laboratory work is designed to support practical applications and prepares the student for State Board Manicuring examination.

Criminal Justice

See Administration of Justice

Dance

Dance 1

Dance Appreciation
3 units; 3 hour lecture
Recommended Preparation: eligibility for English 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.

Dance 3

History of Dance in the 20th Century
3 units; 3 hours lecture
Recommended Preparation: Dance 19ab or the equivalent and eligibility for English 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.

Dance 5

Music for Dance
2 units; 1 hour lecture, 3 hours lab
Recommended Preparation: eligibility for English 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.

Dance 9ab

Flamenco Dance
1 unit; 3 hours lab
Credit, degree applicable
Transfer CSU, UC
This course introduces Flamenco dance through the practice of steps and choreography as well as the study of music, costumes, and cultures from selected countries. Emphasis is placed on basic Flamenco dance footwork as well as necessary skills for stylistic expression.

Dance 10

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.

Dance 12abcd

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.

Dance 14ab

Mexican Dance
1 unit; 3 hours lab
Credit, degree applicable
Transfer CSU, UC
This course introduces the dances of Mexico through practice of steps and choreography and the study of music, costume and culture from selected regions and historical periods. Emphasis is placed on basic Mexican folk dance footwork and necessary motor skills for stylistic expression. Attendance at selected dance events is required.

Dance 16ab

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 P/NP option.

*Some UC transferable courses have credit limitations.
For details, see a counselor, the Transfer Center advisor, or the articulation officer.
## Dance – A.A. Degree

### El Camino College Major Requirements

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<thead>
<tr>
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<th>Course Title</th>
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<th>Hours Lecture</th>
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### Dance 17abcd

**Intermediate African Dance**

- Units: 2
- Hours lecture: 1
- Hours lab: 3

Prerequisite: one semester of Dance 16ab with a minimum grade of C

Recommended Preparation: Dance 22ab or Dance 42ab

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 P/NP option.

### Dance 19ab

**Beginning Dance**

- Units: 2
- Hours lecture: 1
- Hours lab: 3

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 P/NP option.

### Dance 20abcd

**Body Conditioning for Dance Techniques**

- Units: 1
- Hours lab: 3

Credit, degree applicable

Transfer CSU, UC

In this course, students are introduced to the principles of ballet-based technique through exercise systems specific to dance training. Class activities emphasize alignment, placement, strength, injury prevention, and efficient joint articulation. Muscular and skeletal terminology as well as basic ballet terminology are introduced. This class is appropriate for dancers at all levels, including those beginning dance training and those returning after an injury or period of inactivity.

### Dance 21abcd

**Pilates Mat Class**

- Units: 2
- Hours lecture: 1
- Hours lab: 3

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 P/NP option.

### Dance 22ab

**Jazz Dance I**

- Units: 2
- Hours lecture: 1
- Hours lab: 3

Prerequisite: one semester of Dance 19ab 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 P/NP option.

### Dance 23abcd

**Jazz Dance II**

- Units: 2
- Hours lecture: 1
- Hours lab: 3

Prerequisite: one semester of Dance 22ab with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC

This 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 P/NP option.

### Dance 25abcd

**Commercial Dance**

- Units: 2
- Hours lecture: 1
- Hours lab: 3

Prerequisite: one semester of Dance 23abcd with a minimum grade of C

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 P/NP option.

### Dance 26abcd

**Hip Hop Dance**

- Units: 2
- Hours lecture: 1
- Hours lab: 3

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 P/NP option.
Dance 32ab

**Ballet I**

2 units; 1 hour lecture, 3 hours lab  
Recommended Preparation: Dance 19ab or equivalent  
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 P/NP option.*

Dance 33abcd

**Ballet II**

2 units; 1 hour lecture, 3 hours lab  
Prerequisite: one semester of Dance 32ab 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 P/NP option.*

Dance 35abcd

**Ballet Variations**

2 units; 1 hour lecture, 3 hours lab  
Prerequisite: one semester of Dance 32ab with a minimum grade of C  
Recommended Preparation: Dance 33abcd  
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 P/NP option.*

Dance 42ab

**Modern Dance I**

2 units; 1 hour lecture, 3 hours lab  
Recommended Preparation: Dance 19ab or equivalent  
Credit, degree applicable  
Transfer CSU, UC  
This course is the first in a sequence of two 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 dance events sponsored by the Center for the Arts.  
*Note: Letter grade or P/NP option.*

Dance 43abcd

**Modern Dance II**

2 units; 1 hour lecture, 3 hours lab  
Prerequisite: one semester of Dance 42ab with a minimum grade of C or equivalent  
Credit, degree applicable  
Transfer CSU, UC  
This is a modern dance course at the intermediate level. It 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 P/NP option.*

Dance 50

**Special Topics in Dance**

Units determined by individual course; lecture/lab hours determined by individual course  
Credit status determined by individual course  
This course is designed to explore topics in Dance more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.  
*Note: Letter grade or P/NP option.*

Dance 51ab

**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 is required at selected events.  
*Note: Letter grade or P/NP option.*

Dance 52abcd

**Intermediate Latin Social Dance**

2 units; 1 hour lecture, 3 hours lab  
Prerequisite: one semester of Dance 51ab with a minimum grade of C  
Credit, degree applicable  
Transfer CSU, UC  
This course builds on the basic vocabulary and steps of the Latin social dances including salsa, cha cha, tango, rhumba, 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 P/NP option.*

Dance 53ab

**American Social Dance**

2 units; 1 hour lecture, 3 hours lab  
Credit, degree applicable  
Transfer CSU, UC  
This course is an overview of American social dance of the 20th century, including West Coast Swing, East Coast Swing, Lindy Hop and Country Line Dance. 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 is required at selected events.  
*Note: Letter grade or P/NP option.*

Dance 54abcd

**Intermediate American Social Dance**

2 units; 1 hour lecture, 3 hours lab  
Prerequisite: one semester of Dance 53ab with a minimum grade of C  
Credit, degree applicable  
Transfer CSU, UC  
This course builds on the basics of American Social Dance in the 20th century including West Coast Swing, East Coast Swing, Lindy Hop, and Country Line Dance. 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 P/NP option.*

Dance 61ab

**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.  
*Note: Letter grade or P/NP option.*

Dance 62abcd

**Tap Dance II - Intermediate**

2 units; 1 hour lecture, 3 hours lab  
Prerequisite: one semester of Dance 61ab with a minimum grade of C  
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.  
*Note: Letter grade or P/NP option.*
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, choreographers, or crew.

Dance 70abcd

**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 P/NP option.

Dance 71ab

**Choreography I**

2 units; 1 hour lecture, 3 hours lab  
Prerequisite: Dance 19ab and Dance 70abcd with a minimum grade of C. Dance 70abcd may be taken concurrently with Dance 71ab  
Credit, degree applicable  
Transfer CSU, UC  
This course is an introduction to fundamental skills and concepts of choreography with an emphasis on utilizing movement resources for creating dances. Attendance at selected dance events is required.

Dance 72abcd

**Choreography II**

2 units; 1 hour lecture, 3 hours lab  
Prerequisite: Dance 71ab 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 Dance 71ab. Methods of expanding initial movement concepts from a solo or small group to large group composition are also emphasized. Attendance at selected dance events is required.

Dance 83abcd

**Dance Workshop Ensemble**

1 unit; 4 hours lab  
Corequisite: enrollment in any of the following technique classes: Dance 14ab, 16ab, 17abcd, 18abcd, 19ab, 22ab, 23abcd, 25abcd, 32ab, 33abcd, 35abcd, 42ab, 43abcd, 51ab, 52abcd, 53ab, 54abcd, 61ab, 62abcd  
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, choreographers, or crew.

Dance 87abcd

**Concert Dance Ensemble**

1 unit; 4 hours lab  
Enrollment Limitation: audition  
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. This is an intensive 9-week course with extended rehearsal times to be arranged.

Dance 89abcd

**Advanced Dance Theatre**

1 unit; 4 hours lab  
Enrollment Limitation: audition  
Credit, degree applicable  
Transfer CSU, UC  
In this class 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.

Dance 99abc

**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, UC - limitations apply  
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 (60 hours per unit).  
Note: Refer to page 11 of this Catalog for eligibility requirements.

Drafting Technology

**See Computer Aided Design/Drafting**

Economics

**Economics 5**

**Fundamentals of Economics**

3 units; 3 hours lecture  
Recommended Preparation: eligibility for English 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 Economics 1 or 2.

**Economics 1**

**Principles of Economics:**

**Macroeconomics**

3 units; 3 hours lecture  
Prerequisite: Mathematics 73 or 80 with a minimum grade of C or qualification by testing (El Camino College Mathematics Placement Test) and assessment  
Recommended Preparation: Economics 5; eligibility for English 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.

**Economics 2**

**Principles of Economics:**

**Microeconomics Theory**

3 units; 3 hours lecture  
Prerequisite: Economics 1 with a minimum grade of C  
Credit, degree applicable  
Transfer CSU, UC  
This course focuses on the development of 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.

*Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center advisor, or the articulation officer.*
Economics – A.A. Degree

[Behavioral and Social Sciences Division]

The degree in economics is designed to provide students with a foundation in macro-economics and microeconomics theory. Economics majors will acquire knowledge of the principal 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.

El Camino College Major Requirements
Economics 1, 2, Mathematics 160 and 161 or 190 and 191; two courses from: History 101, 102, 140, 141, Political Science 1
Total Units: 19-22

Preparation for the 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 50
Special Topics in Economics
Units determined by individual course; lecture/lab hours determined by individual course
Credit status determined by individual course
This course is designed to explore topics in Economics more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

Economics 99abc
Independent Study
1-3 units; hours to be arranged
Enrollment Limitation: Economics 1 and 2 with a minimum grade of B in each and acknowledgement by the instructor with whom the student will work
Credit, degree applicable
Transfer CSU, UC - limitations apply
This course provides advanced studies in a subject field of Economics not covered in the regular departmental offerings. Regular conferences will be held with the instructor to discuss and coordinate assigned projects (60 hours per unit).
Note: Refer to page 11 of this Catalog for eligibility requirements.

Education

Education 201
Foundations in Education
3 units; 3 hours lecture
Prerequisite: Education 101 with a minimum grade of C; eligibility for English 1A Credit, degree applicable
Transfer CSU, UC
This course introduces students to the 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, and credential requirements. Throughout the course, students will contribute materials to their portfolios and will also conduct a minimum of 30 hours of pre-approved, structured fieldwork in diverse classroom settings.

Education Development

Educational Development 8ab
Basic Mathematics Preparation for Deaf and Hard of Hearing Students
3 units; 2 hours lecture, 3 hours lab
Credit, not degree applicable
This is a self-paced developmental course designed for Deaf and Hard-of-Hearing students to develop competence with basic mathematical operations. Topics include whole numbers, fractions and decimals. Emphasis is upon computational skills.
Note: This course is taught in American Sign Language and is designed for students who are Deaf and Hard-of-Hearing.
Note: Pass/no pass only

Educational Development 9ab
Advanced Mathematics Preparation for Deaf and Hard-of-Hearing Students
3 units; 2 hours lecture, 3 hours lab
Prerequisite: credit in Educational Development 8ab
Credit, not degree applicable
This is a self-paced developmental course designed for Deaf and Hard-of-Hearing students to develop competence with advanced mathematical skills. Topics covered include ratios, proportions, percents, measurements, geometry, statistics, and algebra. Major emphasis is on solving verbal problems.
Note: This course is taught in American Sign Language and is designed for students who are Deaf and Hard-of-Hearing.
Note: Pass/no pass only

The hours per week of courses may be adjusted based on the length of the term.
Educational Development 10abcd
English Grammar for Deaf and Hard of Hearing Students
3 units; 3 hours lecture, 1 hour lab
Recommended Preparation: none
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.
Note: Pass/no pass only

Educational Development 11abcd
Writing and Reading for Deaf and Hard of Hearing Students
3 units; 2 hours lecture, 2 hours lab
Recommended Preparation: none
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.
Note: Pass/no pass only

Educational Development 14
American Sign Language for Deaf and Hard of Hearing Students
3 units; 2 hours lecture, 3 hours lab
Credit, not degree applicable
This course will provide instruction for deaf and hard of hearing students in the development of sign vocabulary, finger spelling, receptive and expressive skills, and appropriate use of American Sign Language.
Note: It is recommended that students have verified eligibility for services offered through the Special Resource Center.

Educational Development 21
Career Preparation
2 units; 2 hours lecture, 2 hours lab
Recommended Preparation: eligibility for English 84
Credit, degree applicable
Transfer CSU
This course assists the student in selecting a career and developing effective job seeking skills. The student will complete an interest inventory, review academic performance, research various careers and practice the steps necessary to attain employment.
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.

Educational Development 22
Personal Assessment
2 units; 1 hour lecture, 3 hours lab
Recommended Preparation: eligibility for English 84
Credit, degree applicable
Transfer CSU
This course helps students develop a better understanding of personal motivation as they establish short- and long-term goals. Students will also explore their personal value systems, the concepts of stress management, defense mechanisms, interpersonal communications, and time management.
Note: This course is appropriate for students with disabilities.

Educational Development 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: Pass/no pass only

Educational Development 31abcd
Increased Learning Performance
1 unit; 3 hours lab
Credit, not degree applicable
In this laboratory course, students will increase learning performance and study skills that relate to content of other El Camino College courses. Students will also enhance critical thinking skills and evaluate assistive technologies that improve academic success. In addition, specific sections of the course will be offered for English and mathematics skills.
Note: This course is appropriate for students with disabilities.
Note: Pass/no pass only

Educational Development 32ab
Psychology of Affective Learning
3 units; 3 hours lecture
Credit, not degree applicable
This course is designed to expose students to effective principles and exercises that enhance the students's self concept as a learner. The benefits of a positive attitude and learning performance will also be covered.
Note: This course is appropriate for students with disabilities.
Note: Pass/no pass only

Educational Development 33ab
Specific Learning Strategies
3 units; 3 hours lecture
Credit, not degree applicable
In this course students will explore specific techniques, principles, and strategies which enable them to effectively acquire, integrate, store, and retrieve information.
Note: This course is appropriate for students with disabilities.
Note: Pass/no pass only

Educational Development 35ab
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: Pass/no pass only

*Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center advisor, or the articulation officer.
Educational Development 36ab
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 prepare them for regular English classes.
Note: This course is appropriate for students with disabilities.
Note: Pass/no pass only

Educational Development 40
Assisted Computer Literacy
2 units; 1.5 hours lecture, 1.5 hours lab to be arranged
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 P/NP option

Educational Development 41abcd
Assisted Computer Technology Laboratory
1 unit; 3 hours lab to be arranged
Recommended Preparation: basic computer literacy skills
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. They will improve their skills and competencies in personal computer usage.
Note: Pass/no pass only

Educational Development 50
Special Topics in Educational Development
Units determined by individual course; lecture/lab hours determined by individual course
Credit status determined by individual course
This course is designed to explore topics in Educational Development more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

Note: Some UC transferable courses have credit limitations.
For details, see a counselor, the Transfer Center advisor, or the articulation officer.

Electronics and Computer Hardware Technology

Electronics and Computer Hardware Technology 11
Introduction to Electronics
3 units; 2 hours lecture, 4 hours lab
Credit, degree applicable
Transfer CSU
This course is an introduction to electronics for students preparing to enter the field and for students interested in consumer electronics. It provides the basis for further studies in electronics and computer hardware technology. Topics include safety, employment opportunities, the basic theory and applications of electricity, analysis of circuit values using a standard scientific calculator, component identification and schematic diagrams, and the techniques of electrical measurement. 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.

Electronics and Computer Hardware Technology 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, and ESD (Electrostatic Discharge) awareness. Mass production will be stressed for practical experience in all areas.

Electronics and Computer Hardware Technology 50
Special Topics in Electronics and Computer Hardware Technology
Units determined by individual course; lecture/lab hours determined by individual course
Credit status determined by individual course
This course is designed to explore topics in Electronics and Computer Hardware Technology more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

Electronics and Computer Hardware Technology 95abcd
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 - limitations apply
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: The total units earned for CWEE may not exceed 16 units.
Electronics and Computer Hardware Technology – A.S. Degree and Certificates of Achievement and Accomplishment

(Industry and Technology Division)

The electronics and computer hardware technology program prepares students for employment in the areas of computer hardware and industrial, military, and consumer electronics. Students acquire proficiency in analyzing, assembling, testing, and troubleshooting both analog circuits and computer systems. Students are trained in industry standard codes and symbols for components, systems, safety devices, and procedures. The program also meets the needs of the currently employed who seek to upgrade skills, change careers, or prepare for industry certification and licensing. Competencies will be assessed regularly by student performance in the classroom and laboratory.

El Camino College Major Requirements
At least 50% of the major requirements for the Associate in Science degree must be completed at El Camino College.

Computer Technology Option:
Electronics and Computer Hardware Technology 11, 22, 110, 130, 140ab*, 142ab*, 144ab* (* one semester);
two courses from: Electronics and Computer Hardware Technology 95abcd (one semester), 191, Computer Systems 13, 40
Total Units: 29-31

Electronics Technology Option:
Electronics and Computer Hardware Technology 11, 22, 110, 120, 122, 124, 130, 140ab (one semester);
one course from: Electronics and Computer Hardware Technology 95abcd*, 142ab*, 144ab*, 191, 192 (* one semester)
Total Units: 27-29

Certificates of Achievement
A Certificate of Achievement will be granted upon completion of the courses in one of the following options: Computer Hardware Technician, Electronics Engineering Technician, or Industrial Computer Control Technician. At least 50% of the courses for the Certificate of Achievement must be completed at El Camino College.

Computer Hardware Technician:
Electronics and Computer Hardware Technology 11, 22, 110, 130, 140ab*, 142ab*, 144ab*;
two courses from: Electronics and Computer Hardware Technology 95abcd*, 191, Computer Information Systems 13, 40 (*one semester)
Total Units: 29-31

Electronics Engineering Technician:
Electronics and Computer Hardware Technology 11, 22, 110, 120, 124, 130, 140ab*;
two courses from: Electronics and Computer Hardware Technology 95abcd*, 142ab*, 144ab*, 191, 192, (*one semester)
Total Units: 27-30

Industrial Computer Control Technician:
Electronics and Computer Hardware Technology 11, 22, 110, 120, 124, 130, 140ab*;
191, 192, Machine Tool Technology 10A;
one course from: Electronics and Computer Hardware Technology 95abcd*, 142ab*, (*one semester)
Total Units: 34-36

[continued on next page]
Electronics and Computer Hardware Technology 120
Semiconductor Circuits I
3 units; 2 hours lecture, 4 hours lab
Prerequisite: Electronics and Computer Hardware Technology 110 with a minimum grade of C
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.

Electronics and Computer Hardware Technology 122
Semiconductor Circuits II
3 units; 2 hours lecture, 4 hours lab
Prerequisite: Electronics and Computer Hardware Technology 120 with a minimum grade of C
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.

The hours per week of courses may be adjusted based on the length of the term.

*Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center advisor, or the articulation officer.

Electronics and Computer Hardware Technology 124
Operational Amplifiers and Linear Integrated Circuits
3 units; 2 hours lecture, 4 hours lab
Prerequisite: Electronics and Computer Hardware Technology 120 with a minimum grade of C
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.

Electronics and Computer Hardware Technology 130
Digital Systems and Computer Logic I
3 units; 2 hours lecture, 4 hours lab
Recommended Preparation: Electronics and Computer Hardware Technology 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.

Electronics and Computer Hardware Technology 140ab
Computer Systems and Hardware Technologies I
4 units; 3 hours lecture, 4 hours lab
Recommended Preparation: Electronics and Computer Hardware Technology 11 or equivalent; Computer Information Systems 13 or equivalent
Credit, degree applicable
Transfer CSU
This course provides a general study of computer hardware systems and 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.

Note: Letter grade or P/NP option.
Electronics and Computer Hardware Technology 142ab
Computer Systems and Hardware Technologies II
4 units; 3 hours lecture, 4 hours lab
Prerequisite: Electronics and Computer Hardware Technology 140ab 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 related computer hardware system components and peripheral devices. Installation and configuration of the system hardware, advanced hardware and software integration skills. Conflict resolution, troubleshooting and optimization strategies will be taught.

Note: Letter grade or P/NP option.

Electronics and Computer Hardware Technology 144ab
CompTIA A+ Certification Preparation for Computer Hardware Systems
4 units; 3 hours lecture, 4 hours lab
Prerequisite: Electronics and Computer Hardware Technology 140ab 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: Letter grade or P/NP option.

Electronics and Computer Hardware Technology 146ab
CompTIA Network+ Certification Preparation for Computer Hardware Systems
4 units; 3 hours lecture, 4 hours lab
Prerequisite: one semester of Electronics and Computer Hardware Technology 144ab 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: Letter grade or P/NP option.

Electronics and Computer Hardware Technology 148ab
CompTIA Security+ Certification Preparation for Computer Hardware Systems
4 units; 3 hours lecture, 4 hours lab
Prerequisite: one semester of Electronics and Computer Hardware Technology 146ab 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: Letter grade or P/NP option.

Electronics and Computer Hardware Technology 191ab
Introduction to Microprocessors and Interfacing
3 units; 2 hours lecture, 4 hours lab
Prerequisite: Electronics and Computer Hardware Technology 11 or Electronics and Computer Hardware Technology 130 with a minimum grade of C or equivalent electronics background
Credit, degree applicable
Transfer CSU
This course is an introduction to industrial microprocessors and microcontrollers as they relate to industrial and consumer equipment. Included are the fundamentals of assembly language, use of software to simulate hardware, digital and analog interfacing, data storage, and troubleshooting.

Electronics and Computer Hardware Technology 192
Robotics and Machine Control
4 units; 3 hours lecture, 3 hours lab
Recommended Preparation: Electronics and Computer Hardware Technology 11 or 130 or equivalent
Credit, degree applicable
Transfer CSU
This course covers the study of the fundamentals of robotics and industrial machine control. Topics include programmable controllers (PLCs), hydraulic and pneumatic systems, open and closed loop servo systems, 3-axis coordinate systems and microprocessor control applications.

Elementary School Teaching
See Liberal Studies
**Engineering Technology – A.S. Degree and Certificates of Achievement**

*Industry and Technology Division*

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.

**El Camino College Major Requirements**

At least 50% of the requirements for the major must be completed at El Camino College.

**Engineering Technician Option:** Engineering Technology 10 or 10A and 10B, 12 or 12A and 12B, 14 or 14A and 14B, 16 or 16A and 16B, Machine Tool Technology 101abcd, Technical Mathematics 1; three courses from: Engineering Technology 18 or 18A and 18B, Machine Tool Technology 16ab*, Computer Aided Design/Drafting 28abcd*, Electronics and Computer Hardware Technology 22, Manufacturing Technology 70, 75 or 75A and 75B, Welding 15ab* [*one semester]

Total Units: 26-28

**Engineering Technology Option:** Engineering Technology 10 or 10A and 10B, 12 or 12A and 12B, 14 or 14A and 14B, 16 or 16A and 16B, Chemistry 1A, Mathematics 190, Physics 2A; two courses from: Computer Information Systems 13, Electronics and Computer Hardware Technology 110, Engineering 1, 9, Engineering Technology 18 or 18A and 18B, Machine Tool Technology 101abcd, Manufacturing Technology 70, 75 or 75A and 75B

Total Units: 30-33

**Certificates of Achievement**

A Certificate of Achievement will be granted to students completing the requirements in either the Engineering Technician or Engineering Technology options. At least 50% of the courses for the Certificate of Achievement must be completed at El Camino College.

**Engineering Technician:** Engineering Technology 10 or 10A and 10B, 12 or 12A and 12B, 14 or 14A and 14B, 16 or 16A and 16B, Machine Tool Technology 101abcd, Technical Mathematics 1; three courses from the following: Engineering Technology 18 or 18A and 18B, Machine Tool Technology 16ab*, Computer Aided Design/Drafting 28abcd*, Electronics and Computer Hardware Technology 22, Manufacturing Technology 70, 75 or 75A and 75B, Welding 15ab* [*one semester]

Total Units: 26-28

**Engineering Technology:** Engineering Technology 10 or 10A and 10B, 12 or 12A and 12B, 14 or 14A and 14B, 16 or 16A and 16B, Chemistry 1A, Mathematics 190, Physics 2A; two courses from: Computer Information Systems 13, Electronics and Computer Hardware Technology 110, Engineering 1, 9, Engineering Technology 18 or 18A and 18B, Machine Tool Technology 101abcd, Manufacturing Technology 70, 75 or 75A and 75B

Total Units: 30-33

*Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center advisor, or the articulation officer.

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**Engineering See Pre-Engineering for A.S. Degree Requirements**

**Engineering 1**

*Introduction to Engineering*

2 units; 2 hours lecture
Credit, degree applicable
Transfer CSU, UC

This course is an introduction 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.

**Engineering 9**

*Engineering Mechanics - Statics*

3 units; 3 hours lecture
Prerequisite: Physics 1A and Mathematics 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.

**Engineering Technology**

**Engineering Technology 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.
The hours per week of courses may be adjusted based on the length of the term.
In this capstone course, teams of students will work together to design and construct manufacturing systems. Additional topics covered include simulating environments, rapid prototyping (RP), and robotics. Students will create three-dimensional designs with modeling software and produce actual components on computer numerically controlled (CNC) machine tools. Additional topics covered include simulations, rapid prototyping (RP), and manufacturing systems.

Note: The two course sequence Engineering Technology 16A and Engineering Technology 16B is the same as Engineering Technology 16.

Engineering Technology 18

Engineering Design and Development

3 units; 2 hours lecture, 4 hours lab
Prerequisite: Engineering Technology 12, 14, and 16 with a minimum grade of C in prerequisite
Credit, degree applicable
Transfer CSU

In this capstone course, teams of students will work together 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.

*Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center advisor, or the articulation officer.
English – A.A. Degree

(Humanities Division)

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.

El Camino College Major Requirements

English 1A-1B, 15A-15B; 3 units from English 20, 21, 23, 35, 36, 40A, 40B; 6 units from the following literature or writing courses: Literature Courses - English 10, 12, 18, 22, 26, 27, 28, 29, 30, 31, 34, 39, 42, 43, 44, 46; Writing Courses - English 1C, 24A, 25A, 32abc, 33, 38

Total Units: 22

Preparation for the 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.

English 82
(formerly English R)

Introduction to Reading Skills

3 units; 3 hours lecture, 1 hour lab
Prerequisite: credit in English 80 or qualification by testing [English Placement Test] and assessment
Credit, not degree applicable
This course is designed to improve general reading and thinking abilities through increasing the following skills: comprehension, vocabulary, reading speed, and study and test-taking techniques. Special emphasis will be placed on analysis of longer reading passages.

Note: Pass/no pass only

English 84
(formerly English 2R)

Developmental Reading and Writing

3 units; 3 hours lecture, 1 hour lab
Prerequisite: credit in English 82 or qualification by testing [English Placement Test] and 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 be able to integrate specific reading strategies rather than focus on individual skills, and will write responses to texts.

Note: Pass/no pass only
Note: Students who receive credit for both English 84 and English A can count only one course for degree credit.

English A

Writing the College Essay

3 units; 2 hours lecture, 2 hours lab
Prerequisite: credit in English B or qualification by testing [English Placement Test] and 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 write their own using peer 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
Note: Students who receive credit for both English A and English 84 can count only one course for degree credit.

English A-X

Writing the College Essay

4 units; 5 hours lecture
Prerequisite: ESL 53B with a minimum grade of C or qualification by assessment
Credit, degree applicable
This course is designed to strengthen college-level writing skills in preparation for English 1A. 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. Students will review functional grammar and sentence skills and be introduced to techniques of research and documentation. This course is designed for students for whom English is their second language.

English 1A

Reading and Composition

4 units; 4 hours lecture
Prerequisite: credit in English A and credit in English 84 or English 7; or qualification by testing [English Placement Test] and 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 on writing essays in which each paragraph relates to a controlling idea, has an introduction and a 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, and English 1A, Reading and Composition for Foreign Students is one course.
English 1A
**Reading and Composition for Foreign Students**

4 units; 5 hours lecture
Prerequisite: ESL 52B with a minimum grade of C and credit in English A-X or qualification by assessment
Credit, degree applicable
Transfer CSU, UC*

This course is designed to strengthen students’ ability to read with understanding and discernment, to discuss assigned readings intelligently, and to write clearly. Emphasis will be on writing essays in which each paragraph relates to a controlling idea, has an introduction and a 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 designed for students for whom English is their second language.

Note: The maximum UC credit allowed for students completing English 1A, Reading and Composition, and English 1A, Reading and Composition for Foreign Students is one course.

English 1B
**Literature and Composition**

3 units; 3 hours lecture
Prerequisite: English 1A with a minimum grade of C
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.

English 1C
**Critical Thinking and Composition**

3 units; 3 hours lecture
Prerequisite: English 1A with a minimum grade of C
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.

English 4
**Grammar and Structure**

3 units; 3 hours lecture, 1 hour lab
Recommended Preparation: eligibility for English A
Credit, degree applicable

This course is for students who want to become thoroughly familiar with English grammar, structure, and usage. An emphasis is placed on recognizing, writing, and combining sentences. In addition, traditional grammar, usage, and mechanics, as they pertain to writing with correctness, clarity, and effective style, are included.

Note: Letter grade or P/NP option.

English 7
**Speed and Power Reading**

3 units; 3 hours lecture, 1 hour lab
Prerequisite: eligibility for English 84 or ESL 52B
Credit, degree applicable

This course is designed to increase a student’s reading speed and flexibility while improving comprehension and critical thinking skills. Systematic processes for applying active reading strategies and for logically and efficiently analyzing text are emphasized. In addition, training for phrase-reading, skimming and scanning techniques, study skills, and vocabulary development are included.

Note: Pass/no pass only.

English 10
**Introduction to Poetry**

3 units; 3 hours lecture
Recommended Preparation: eligibility for English 1A
Credit, degree applicable
Transfer CSU, UC

This course provides an intensive study of poetry, examining individual poems and a variety of poetic types and techniques. Written analysis is stressed as students learn to organize and develop critical essays about poetry.

English 12
**Introduction to Fiction**

3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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 and the contributions of individual authors to each genre.

English 15A
**Survey of British Literature**

3 units; 3 hours lecture
Prerequisite: English 1A with a minimum grade of C
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 Táin, 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.

English 15B
**Survey of British Literature**

3 units; 3 hours lecture
Prerequisite: English 1A with a minimum grade of C
Note: English 15A is not a prerequisite to 15B
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 Browning, the Brontés, Arnold, Hardy, Yeats, Conrad, Joyce, Eliot, Woolf, Lawrence, Beckett, Heaney, Pinter, and others.

English 18
**Survey of Women Writers: Middle Ages to the Present**

3 units; 3 hours lecture
Recommended Preparation: eligibility for English 1A
Credit, degree applicable
Transfer CSU, UC

This course examines the literary contributions of women writers from the Middle Ages to the present. Students will study works of women’s literature in traditional and nontraditional genres, as well as examine the aesthetic, political, historical, cultural, and social contexts of the lives and works of women writers.

The hours per week of courses may be adjusted based on the length of the term.
English 20
Shakespeare’s Plays - Tragedies and Romances
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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 Analysis. Students will become familiar with the Elizabethan era and learn to appreciate the universality of Shakespeare’s art.

English 21
Shakespeare’s Plays - Comedies and Histories
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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.

English 22
Suspense Literature
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 1A
Credit, degree applicable
Transfer CSU, UC
This course examines various types of suspense literature from the 19th century to the present. Students read, analyze, discuss, and evaluate examples of the most widely-read and enduring suspense literature forms: mystery, detective, crime, ad psychological suspense fiction. Students also examine the history of suspense literature and the cultural contexts that have given rise to the various suspense genres. Other suspense literature genres may be discussed, including gothic, spy, fantasy, horror, and science fiction.

English 23
Twentieth Century Literature
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 1A
Credit, degree applicable
Transfer CSU, UC
This course focuses on reading and interpreting literature from the two major genres of the twentieth century: Modernism and Postmodernism. Students study the elements, themes, and styles of these genres as they pertain to American and British literature, as well as literature in translation.

English 24A
Creative Writing: Introduction to Poetry
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 1A
Credit, degree applicable
Transfer CSU
This course is an introduction to the creative process of writing poetry, including the inception of a specific poem, the use of poetry techniques in the actual writing of a poem, and the development of students’ critical sense in writing and revising their own poems.
Note: Letter grade or P/NP option.

English 25A
Creative Writing: Introduction to the Craft of Fiction
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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. Introduction to direct and indirect characterization will be illustrated through the narrative modes of action, description, exposition, and narration. Students will also learn about peer editing and the workshop model for revising stories.
Note: Letter grade or P/NP option.

English 26
The Literature of Science Fiction
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 1A
Credit, degree applicable
Transfer CSU, UC
This course examines various types of science fiction from the 20th century to the present. Students read, analyze, discuss, and evaluate examples of the most widely-read and enduring science fiction genres: space adventure, utopian/dystopian, near-future, high-tech, and futuristic human/social interaction. Students also examine the history of science fiction and the cultural contexts that have given rise to the various science fiction genres. Other science fiction genres may be discussed including gothic, suspense, horror, and fantasy.

English 27
Children’s Literature
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 1A
Credit, degree applicable
Transfer CSU
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.

English 28
Images of Women in Literature
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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, fairytales, 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 re-visionist approaches.

*Some UC transferable courses have credit limitations.
For details, see a counselor, the Transfer Center advisor, or the articulation officer.
This course develops advanced skills in the reading and criticism of world literature. Students explore the similarities and differences of folklore and literature, the elements of creative nonfiction, the writing process, journaling, peer editing, and the workshop model. Students will produce a portfolio of their own writing by semester’s end.

English 33
Creative Writing: Introduction to Creative Nonfiction
3 units; 3 hours lecture
Recommended Preparation: eligibility for English IA
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.

English 34
The Short Story
3 units; 3 hours lecture
Recommended Preparation: eligibility for English IA
Credit, degree applicable
Transfer CSU, UC
This course examines masterpieces of short fiction by modern and contemporary American authors of various cultures.

English 35
World Literature, 3500 BCE to 1650 CE
3 units; 3 hours lecture
Recommended Preparation: eligibility for English IA
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.

English 36
World Literature, 1650 CE to Present
3 units; 3 hours lecture
Recommended Preparation: eligibility for English IA
Credit, degree applicable
Transfer CSU, UC
This course examines masterpieces of world literature from the mid-17th through 20th 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.

English 39
Literature and Film
3 units; 3 hours lecture
Recommended Preparation: eligibility for English IA
Credit, degree applicable
Transfer CSU, UC
This course provides an exploration of literary works and corresponding feature-length films. Students analyze selected novels and short stories as well as filming techniques. Oral and written Analysis will feature comparisons of the original literary work and its film adaptation.

English 40A
American Literature
3 units; 3 hours lecture
Recommended Preparation: eligibility for English IA
Credit, degree applicable
Transfer CSU, UC
This course surveys American literature from its beginnings through the Civil War, including material from several categories: the narratives of native peoples, the literature of Pre-Revolutionary America, the literature of an emerging nation, and the literature of Antebellum America. This course recognizes the contributions of women and minority writers to the national literature.

English 40B
American Literature
3 units; 3 hours lecture
Recommended Preparation: eligibility for English IA
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.
This course will focus on the analysis and techniques used by the filmmakers, as well as concerns of particular nationalities and time periods. Students study representative film masterpieces from the late 19th century to 1950, the age of television, 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.

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 the late 19th century to 1950, the age of television, 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.

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.

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.

This course provides a chronological and thematic survey of African American ethnicity. Students will examine and discuss representative works by members of the following groups: African Americans, Asian Pacific Americans, Chicanos/Latinos, Europeans, and Near Eastern Americans. Emphasis will be on contemporary literature.

This course examines how a culture's ideas about gender identity and sexual orientation affect the form and impact of literature. Materials will include canonical works that reflect themes of dissident sexuality, as well as contemporary works that write openly about the modern gay and lesbian experience.

This course introduces students to literature written about California, and includes historical and cultural backgrounds, regional and ethnic experiences, and unifying themes and motifs. Literary genres and critical theories of California literature are studied.

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.

This course is designed to explore topics in English more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

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 publishing process, proofread and edit submissions, and design and compose layout. In addition, students will organize a public literary reading.

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 (60 hours per unit).

Note: Refer to page 11 of this Catalog for eligibility requirements.
English 100
Supervised Tutoring: Writing Center Laboratory
0 units; 72 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 anytime during the semester.

English as a Second Language

Course Sequence Leading to English 1A

English 1A
4 units
Reading and Composition for Foreign Students

English 52C
4 units
Advanced Reading (Optional)

English 52B
4 units
Intermediate Reading and Vocabulary Building

English 52A
4 units
Introduction to Reading and Vocabulary Building

English A-X
3 units
Writing the College Essay

English 53B
4 units
Intermediate Writing and Grammar

English 53A
4 units
Elementary Writing and Grammar

English as a Second Language 01
Preparation for Naturalization and Citizenship
0 units; 3 hours lecture
Non-credit
This ESL course provides the non-native English speaker with the language skills needed to pass the reading, writing, and written portions of the U.S. Citizenship Immigration Services (USCIS) naturalization examination. Students will apply language skills to materials related to the interview process and to the history of the United States, the structure of American government, and the responsibilities of American citizens.

English as a Second Language 02A
Conversation and Grammar
Level I
0 units; 5 hours lecture
Recommended Preparation: concurrent enrollment in English as a Second Language 03A
Non-credit
This Level I conversation and grammar course provides focused practice on English grammar forms and structures through listening, speaking, reading, and writing activities. Emphasis is on the verb "be," the simple present tense, nouns, adjectives, prepositions, statements, and questions. Capitalization and punctuation rules are also introduced and applied in writing simple sentences.

English as a Second Language 02B
Conversation and Grammar
Level II
0 units; 5 hours lecture
Recommended Preparation: concurrent enrollment in English as a Second Language 02A and 02B; concurrent enrollment in English as a Second Language 03B
Non-credit
This Level II conversation and grammar course provides focused practice on English grammar forms and structures through listening, speaking, reading, and writing activities. Emphasis is on prepositions of time, possessive nouns and adjectives, present progressive and simple past tense, modals of ability and suggestion, imperatives, and punctuation rules.

English as a Second Language 02C
Conversation and Grammar
Level III
0 units; 5 hours lecture
Recommended Preparation: qualification by assessment or completion of English as a Second Language 02A and 02B; concurrent enrollment in English as a Second Language 03C
Non-credit
This Level III conversation and grammar course provides focused practice on English grammar forms and structures through listening, speaking, reading, and writing activities. Emphasis is on verb tenses, direct/indirect objects, modals, comparatives, superlatives, count and non-count nouns, and quantifiers.

English as a Second Language 02D
Conversation and Grammar
Level IV
0 units; 5 hours lecture
Recommended Preparation: qualification by assessment or completion of English as a Second Language 02C; concurrent enrollment in English as a Second Language 03D
Non-credit
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 the continuous and perfect tenses, transitive and intransitive verbs, irregular verb forms, the passive voice, participial adjectives, and idioms.

English as a Second Language 03A
Reading and Writing
Level I
0 units; 5 hours lecture
Recommended Preparation: concurrent enrollment in English as a Second Language 02A
Non-credit
This Level I reading and writing course is designed to improve reading comprehension, increase vocabulary, and improve critical thinking and writing skills. Students will write descriptive and chronologically ordered paragraphs.

The hours per week of courses may be adjusted based on the length of the term.
English as a Second Language 03B
Reading and Writing
Level II
0 units; 5 hours lecture
Recommended Preparation: qualification by assessment or completion of English as a Second Language 03A; concurrent enrollment in English as a Second Language 02B
Non-credit
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, instructional, biographical, narrative, and subjective paragraphs.

English as a Second Language 03C
Reading and Writing
Level III
0 units; 5 hours lecture
Recommended Preparation: qualification by assessment or completion of English as a Second Language 03B; concurrent enrollment in English as a Second Language 02C
Non-credit
This Level III 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.

English as a Second Language 03D
Reading and Writing
Level IV
0 units; 5 hours lecture
Recommended Preparation: qualification by assessment or completion of English as a Second Language 03C; concurrent enrollment in English as a Second Language 02D
Non-credit
This Level IV 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, use context for determining meaning of texts, and develop critical thinking skills. In writing, students will study a variety of grammatical structures and transitional expressions to help generate simple expository paragraphs.

English as a Second Language 50
Special Topics in English as a Second Language
Units determined by individual course; lecture/lab hours determined by individual course
Credit status determined by individual course
This course is designed to explore topics in English as a Second Language more specifically than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

English as a Second Language 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 activate a student’s English-speaking and English-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.

English as a Second Language 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; performing role plays and dramas; and discussing and debating controversial topics. Students improve their pronunciation, intonation and stress, listening comprehension, and knowledge of idiomatic expressions and American culture and humor.

English as a Second Language 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 advanced instruction in listening and speaking skills, emphasizing oral communication, pronunciation, and idiomatic expressions in a multi-cultural academic setting. Students practice listening to and taking notes on authentic lectures from across the curriculum. Students present speeches and participate in group discussions, debates, and other group activities.

English as a Second Language 52A
Introduction to Reading and Vocabulary Building
4 units; 5 hours lecture
Recommended Preparation: qualification by assessment
Credit, not 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.

English as a Second Language 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.

*Some UC transferable courses have credit limitations.
For details, see a counselor, the Transfer Center advisor, or the articulation officer.
English as a Second Language 52C

Advanced Reading

4 units; 5 hours lecture
Prerequisite: ESL 52B with a minimum grade of C or qualification by assessment
Credit, degree applicable
The purpose of this course is to provide interpretive, critical and analytical reading skills for fiction and nonfiction genres. It includes an in-depth study of a novel and the language necessary to discuss and write critically about what is read.

English as a Second Language 53A

Elementary Grammar and Writing

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.

English as a Second Language 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 intermediate-level academic composition course offers students an intensive experience in writing college essays. Students will learn to write well-organized, coherent expository essays, including critical reactions to readings, and employing various rhetorical modes. Basic rules of grammar are reviewed and more advanced rules are introduced.

English as a Second Language 54

American Culture for ESL Students

2 units; 2 hours lecture
Recommended Preparation: ESL 51B, ESL 52B, and ESL 53B
Credit, not degree applicable
This ESL students to succeed in college-level courses by introducing them to traditional and changing values in the United States such as individualism, self-reliance, pragmatism, and consumerism. Students will learn how these values affect education, family life, and popular culture. Students will improve their English language skills by analyzing television shows, movies, magazine and newspaper articles, as well as by conducting informal surveys and observation tasks.

Environmental Horticulture – A.S. Degree and Certificate of Achievement

[Natural Sciences Division]

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.

El Camino College Major Requirements

At least 50% of the requirements for the major must be completed at El Camino College.
Horticulture 41, 42, 46, 53, 54, 55, 56; one course from: Biology 15, 16, Horticulture 44, 60, 95abcd
Total Units: 23-25

Certificate of Achievement

A Certificate of Achievement will be awarded upon completion of the courses listed below. At least 50% of the requirements for the certificate must be completed at El Camino College.
Horticulture 41, 42, 46, 53, 54, 55, 56; one course from: Biology 8, 15, 16, Horticulture 44, 60, 95abcd
Total Units: 23-25

Environmental Horticulture

Horticulture 41

General Horticulture

3 units; 3 hours lecture
Recommended Preparation: eligibility for English 84
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 soil preparation and plant selection, turf grass selection, installation and care, landscape design, nursery management, plant propagation, integrated pest management, house plants, and basic botany and physiology. Career opportunities in horticulture will also be discussed.

Horticulture 42

Plant Propagation

3 units; 2 hours lecture, 3 hours lab
Recommended Preparation: eligibility for English 84
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.

*Some UC transferable courses have credit limitations.
For details, see a counselor, the Transfer Center advisor, or the articulation officer.
Horticulture 44  
Ecology of Edible, Medicinal and Poisonous Plants  
3 units; 2 hours lecture, 3 hours lab to be arranged  
Recommended Preparation: eligibility for English 84  
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.

Horticulture 46  
Pest Control  
3 units; 3 hours lecture  
Recommended Preparation: eligibility for English 84 and Mathematics 40  
Credit, degree applicable  
Transfer CSU  
This course will emphasize 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.

Horticulture 50  
Special Topics in Horticulture  
Units determined by individual course; lecture/lab hours determined by individual course  
Credit status determined by individual course  
This course is designed to explore topics in Horticulture more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

Horticulture 53  
Soils and Fertilizers  
3 units; 2 hours lecture, 3 hours lab  
Recommended Preparation: eligibility for English 84 and Mathematics 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.

Horticulture 54  
(formerly Horticulture 52B)  
Landscape Design  
3 units; 3 hours lecture  
Recommended Preparation: Horticulture 55 and 56; eligibility for English 84  
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.

Horticulture 55  
Plant Identification - Trees  
3 units; 3 hours lecture  
Recommended Preparation: eligibility for English 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.

Horticulture 56  
Plant Identification - Shrubs, Vines, and Groundcovers  
3 units; 3 hours lecture  
Recommended Preparation: eligibility for English 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.

Horticulture 60  
Basic Landscape Irrigation  
3 units; 2 hours lecture; 3 hours lab  
Recommended Preparation: eligibility for Mathematics 23  
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.

Horticulture 99abcd  
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 - limitations apply  
This course provides the student an opportunity to explore research problems in Environmental Horticulture not covered in the regular departmental offerings through laboratory and field projects. Regular conferences with the instructor are coordinated with assigned laboratory work and/or research projects (60 hours per unit).

Note: Refer to page 11 of this Catalog for eligibility requirements.
Environmental Technology

Environmental Technology 1
Sustainable Energy and Renewable Building Sciences and Technologies
3 units; 3 hours lecture
Credit, degree applicable
Transfer CSU
This course is designed to prepare students to survey and evaluate new sustainable alternatives to current building and energy uses within their environment. A concentration on "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.

Environmental Technology 95abcd
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 - limitations apply
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: The total units earned for CWEE may not exceed 16 units.

Environmental Technology 99abc
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 - limitations apply
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 (60 hours per unit).
Note: Refer to page 11 of this Catalog for eligibility requirements.

Ethnic Studies – A.A. Degree
(Behavioral and Social Sciences Division)
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.

El Camino College Major Requirements
African American Studies Option:
English 43, Ethnic Studies 1, History 110, 111, 183, Psychology 10; three units from: Art 9, English 44, History 122, 184, Music 13, Political Science 5, Sociology 104, 107
Total Units: 21
American Cultures Option:
Ethnic Studies 1; complete 15 units from: Anthropology 6, Art 7, English 42, 43, 44, History 108, 110, 111, 112, 122, Psychology 10, Sociology 107; three units from: Anthropology 2, History 154, 175, 176, 183, 184, Music 13, Political Science 5, Sociology 104
Total Units: 21
Asian American Studies Option:
English 44, Ethnic Studies 1, History 114, 175, 176, Sociology 107; three units from: Art 5A, 5B, 6, Japanese 25, Philosophy 12, Political Science 5, Sociology 104
Total Units: 21
Chicano Studies Option:
Art 7, English 42, Ethnic Studies 1, History 112, 154, Political Science 5; three units from: English 44, History 122, Sociology 104, 107
Total Units: 21
Native American Studies Option:
 Anthropology 6, English 44, Ethnic Studies 1, History 108, Political Science 5, Sociology 107; three units from: Anthropology 2, 7, 8, Art 7, Sociology 104
Total Units: 21

Ethnic Studies

Ethnic Studies 1
Introduction to Ethnic Studies
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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.

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Fashion – A. S. Degree and Certificates of Achievement

[Industry and Technology Division]

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, pattern making, 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.

El Camino College Major Requirements
At least 50% of the major requirements for the Associate in Science Degree must be completed at El Camino College.

Fashion Design and Production Option:
- Fashion 1, 2, 4ab*, 10ab*, 14, 15ab*, 17ab*, 20, 26A, 26B, 29ab*, 35, 41, Art 10ab* (*one semester)
- Total Units: 32

Fashion Merchandising Option:
- Fashion 1, 2, 4ab*, 10ab*, 15ab*, 20, 27, 28, 35, 41, 42abc*; Business 22 (*one semester)
- Total Units: 29

Certificates of Achievement
A Certificate of Achievement will be awarded to the student who completes the courses in one of the following options: Costume Technician, Fashion Design and Production, Fashion Merchandising, or Fashion Stylist. At least 50% of the courses required for the Certificate of Achievement must be completed at El Camino College.

Costume Technician:
- Fashion 10ab, 11ab, 17ab, 24abc, 31, 35, 41; Theatre 94
- Total Units: 21

Fashion Design and Production:
- Fashion 1, 2, 4ab*, 10ab*, 14, 15ab*, 17ab*, 20, 26A, 26B, 29ab*, 35, 41, 95abcd [2-4 units];
- three courses from: Fashion 11ab*, 16ab*, 24abc*, 31, 36; Art 10ab*, 37ab* (*one semester)
- Total Units: 39-42

Fashion Merchandising:
- Fashion 1, 2, 4ab*, 10ab*, 15ab*, 20, 27, 28, 35, 41, 42abc*; Fashion 95abcd (2-4 units);
- Business 15, 22;
- two courses from: Business 12, 13, 14, 21, 27 (*one semester)
- Total Units: 39-42

- Total Units: 18

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Fashion 11ab  
**Clothing Construction II**  
3 units; 2 hours lecture, 3 hours lab  
Prerequisite: one semester of Fashion 10ab 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.

Fashion 14  
**Pattern Grading**  
1 unit; 0.5 hours lecture, 1.5 hours lab  
Prerequisite: Fashion 26A with a minimum grade of C or equivalent; Mathematics 40 or Mathematics 43 with a minimum grade of C or equivalent  
Credit, degree applicable  
Transfer CSU  
This course is an introduction to manual grading of patterns with reference to computer grading. The class will define tools, terminology and basic materials and skills necessary for the pattern grading process. This course covers sizing commercial and individual patterns for a run of sizes.

Fashion 15ab  
**Fashion Sketching**  
2 units; 1 hour lecture, 3 hours lab  
Prerequisite: one semester of Art 10ab with a minimum grade of C or equivalent  
Credit, degree applicable  
Transfer CSU  
This course explores creative sketching and illustration techniques for fashion design and merchandising students. Instruction includes the development of the fashion figure, quick sketches, croqui's, and technically detailed flat apparel sketches. Students will creatively illustrate finished fashion illustrations 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.

Fashion 16ab  
**Fashion Illustrating**  
2 units; 1 hour lecture, 3 hours lab  
Prerequisite: one semester of Fashion 15ab with a minimum grade of C or equivalent  
Recommended Preparation: one semester of Art 17ab or concurrent enrollment  
Credit, degree applicable  
Transfer CSU  
In this course, students utilize and refine drawing and rendering skills focusing on illustrations of the fashion figure using various art materials. Students create a fashion illustration portfolio and develop presentation skills specific to creative fashion design. Topics include fashion illustrations for specific categories of merchandise, group or line building conceptualization, apparel workroom illustration or technical flats, fabric rendering and fashion advertising illustration for specific target markets.

Fashion 17ab  
**Decorative Textiles**  
1 unit; 0.5 hour lecture, 1.5 hours lab  
Credit, degree applicable  
Transfer CSU  
Prerequisite: Fashion 20 with a minimum grade of C or equivalent experience  
This course covers decorative techniques applied to fabrics. Techniques include marbling, resisting, block printing, stamping, image transfer, embroidery, beading, and quilting.  
Note: Letter grade or P/NP option.

Fashion 20  
**Textiles**  
3 units; 3 hours lecture  
Recommended Preparation: eligibility for English 84  
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.

Fashion 23  
**Fitting and Alterations**  
2 units; 1 hour lecture, 3 hours lab  
Prerequisite: one semester of Fashion 10ab with a minimum grade of C or equivalent  
Credit, degree applicable  
Transfer CSU  
This course teaches alteration and repair of Ready-to-Wear (RTW) clothing and commercial patterns to conform to body contours by analysis of problem areas, using sewing techniques for the dressmaker, tailor, or home sewer.

Fashion 24abc  
**Tailoring**  
3 units; 2 hours lecture, 3 hours lab  
Prerequisite: one semester of Fashion 10ab with a minimum grade of C or equivalent  
Credit, degree applicable  
Transfer CSU  
This course covers the principles and techniques of hand, machine and speed tailoring of garments commonly used by the tailor, costume technician and apparel designer.

Fashion 26A  
**Basic Design and Patternmaking**  
3 units; 2 hours lecture, 3 hours lab  
Prerequisite: one semester of Fashion 10ab with a minimum grade of C or concurrent enrollment  
Recommended Preparation: Mathematics 40 or mathematics 43; eligibility for English 84  
Credit, degree applicable  
Transfer CSU  
This course covers flat pattern methods for dress and separates apparel using the basic sample size for women's and girls' wear.

Fashion 26B  
**Basic Dress Design Through Draping Process**  
3 units; 2 hours lecture, 3 hours lab  
Prerequisite: one semester of Fashion 10ab 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.

Fashion 27  
**Fashion Merchandising**  
3 units; 3 hours lecture  
Recommended Preparation: eligibility for English 84  
Credit, degree applicable  
Transfer CSU  
This course introduces students to the fashion merchandising industry and its philosophies. The course content includes an overview of the fashion industry and careers in merchandising as well as planning, selecting, selling, and promoting fashion merchandise. Also covered are the math principles required for merchandising and tracking fashion trends.
Fashion 28  
**Visual Merchandising**  
2 units; 1 hour lecture, 3 hours lab  
Recommended Preparation: eligibility for English 84  
Credit, degree applicable  
Transfer CSU  
This course covers the important periods of costume design and their effects on apparel and personal appearance. Emphasis is placed on the history of fashion design, elements and principles of design, wardrobe planning, identifying quality, and clothing care, fit, and purchasing.

Fashion 29ab  
**Computer Pattern Design/Patternmaking**  
3 units; 2 hour lecture, 3 hours lab  
Prerequisite: Fashion 3 with a minimum grade of C or equivalent  
Credit, degree applicable  
Transfer CSU  
This course covers the application of computer pattern aided design Gerber AccuMark software. Students will draft and manipulate basic blocks and garment styles. Students will work in teams to simulate the work environment.  
Note: Letter grade or P/NP option.

Fashion 30  
**History of Costume**  
3 units; 3 hours lecture  
Recommended Preparation: eligibility for English 84  
Credit, degree applicable  
Transfer CSU  
This course covers the important periods of costume design and their effects and relationships to 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 their importance in the evolution and inspiration of modern dress.

Fashion 35  
**Applied Color Theory**  
2 units; 1 hour lecture, 3 hours lab  
Recommended Preparation: eligibility for English 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 phenomenon, effects, and function that occur in fashion design. Students will use color as a visual language to modify space perception and to generate an emotional response when applied to fashion.

Fashion 36  
**Advanced Apparel Pattern Making and Draping Design**  
3 units; 2 hours lecture, 3 hours lab  
Prerequisite: Fashion 15ab, 26A and 26B with a minimum grade of C in prerequisite or equivalent  
Credit, degree applicable  
Transfer CSU  
This course continues the study of flat pattern drafting and draping methods to produce apparel patterns quickly and accurately. For the development of design skills, students create individual projects that have unusual drafting angles and intricate draping details.

Fashion 41  
**Fashion Analysis and Selection**  
3 units; 3 hours lecture  
Recommended Preparation: eligibility for English 84  
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 covered include the history of fashion design, elements and principles of design, wardrobe planning, identifying quality, and clothing care, fit, and purchasing.

Fashion 42abc  
**Fashion Show Production and Promotion**  
3 units; 2 hours lecture, 2 hours lab plus 18 hours to be arranged  
Recommended Preparation: eligibility for English 84  
Credit, degree applicable  
Transfer CSU  
This course is a study of the directing and coordinating of fashion promotions, the psychology used in the marketing of fashion products, the functions of the fashion coordinator, and the techniques and procedures for presenting fashion. Students will evaluate advertising campaigns and participate in two promotions.

Fashion 50  
**Special Topics in Fashion**  
Units determined by individual course; lecture/lab hours determined by individual course  
Credit status determined by individual course  
This course is designed to explore topics in Fashion more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

Fashion 95abcd  
**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 - limitations apply  
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: The total units earned for CWEE may not exceed 16 units.

Fashion 99abc  
**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 - limitations apply  
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 (60 hours per unit).  
Note: Refer to page 11 of this Catalog for eligibility requirements.

The hours per week of courses may be adjusted based on the length of the term.
Film/Video – A.A. Degree and Certificate of Achievement
(Fine Arts Division)

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.

El Camino Major Requirements
Film/Video 1, 3, 20, 22; 11-12 units from: English 38, Film/Video 4, 21, 24, 28ab, 32ab, 34ab, 36ab, 52, 53, 54abc, 95abcd [2-4 units], Photography 51
Total Units: 23-24

Certificate of Achievement
Film/Video Production: A minimum of 12 units must be completed at El Camino College.
Film/Video 1, 20, 22, 24, 28ab; two courses from the following: Film/Video 21, 32ab, 34ab, 36ab
Total Units: 21

Film/Video

Film/Video 1
Film Analysis and Appreciation
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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.

Film/Video 20
Introduction to Film/Video Production
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 1A
Credit, degree applicable
Transfer CSU, UC
This introductory course surveys basic camera, lighting, editing, and sound techniques and their use in producing films and videos.

Film/Video 21
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.

Film/Video 22
Production I
3 units; 2 hours lecture, 3 hours lab
Prerequisite: Film/Video 20 with a minimum grade of C
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.

Film/Video 24
Production Planning
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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.

Film/Video 28ab
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.

Film/Video 3
Screenplay Analysis
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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.

Film/Video 4
Story Development
3 units; 3 hours lecture
Prerequisite: English 1A 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.

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Film/Video 32ab
Production II
3 units; 2 hours lecture, 3 hours lab
Prerequisite: Film/Video 22 or one semester of Film 28ab 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.

Film/Video 34ab
Camera and Lighting
3 units; 2 hours lecture, 3 hours lab
Prerequisite: Film/Video 20or Film/Video 22 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 P/NP option.

Film/Video 36ab
Editing
3 units; 2 hours lecture, 3 hours lab
Prerequisite: none
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 P/NP option.

Film/Video 50
Special Topics in Television and Media Communication
Units determined by individual course; lecture/lab hours determined by individual course
Credit status determined by individual course
This course is designed to explore topics in Film/Video more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

Film/Video 51
Film and Popular Music in Post-World War II America
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 1A
Credit, degree applicable
Transfer CSU, UC
This course surveys the intersection of popular cinema with popular music in American culture and society since World War II. It focuses on the historical, aesthetic, social-political, economic, and technological developments that have shaped the evolution of both popular music and film. Emphasis is placed on how these art forms reflect and impact the cultural and social issues of their times.

Film/Video 52
Film, Culture, and Technology
3 units; 3 hours lecture
Recommended Preparation: Film/Video 1 Credit, degree applicable
Transfer CSU, UC
This course surveys technological innovations in film/video production, distribution, and exhibition and their impact on the entertainment industries and society as a whole. Special emphasis is placed on the economic, social, and political issues raised by technological innovation and the ways new digital and interactive media have both embraced and altered the "old" media. Screening of films that employ new technology or develop technology related themes are also included.

Film/Video 53
American Independent Cinema
3 units; 3 hours lecture
Recommended Preparation: Film/Video 1 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.

Film/Video 54abc
Regional Cinemas
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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.

Film/Video 95abcd
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 - limitations apply
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: The total units earned for CWEE may not exceed 16 units.

Film/Video 99abc
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 acknowledgements by the instructor with whom the student will work
Credit, degree applicable
Transfer CSU - limitations apply
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 (60 hours per unit).
Note: Refer to page 11 of this Catalog for eligibility requirements.
This course is designed to review fire detection and suppression systems. prevention with fire safety education and of fire hazards; and the relationship of fire codes; identification and correction operation of a fire prevention bureau; use phy of fire prevention; organization and information regarding the history and philosopher of fire protection; tactics.

Fire and Emergency Technology 2
Fire Protection Organization
3 units; 3 hours lecture
Recommended Preparation: Fire and Emergency Technology 1 or Fire and Emergency Technology 15 or equivalent; English 84 or eligibility for English 1A
Credit, degree applicable
Transfer CSU
This course provides an introduction to fire protection; career opportunities in fire protection, and related fields; philosophy and history of fire protection; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems; and introduction to fire strategy and tactics.

Fire and Emergency Technology 4
Fire Company Organization and Management
3 units; 3 hours lecture
Recommended Preparation: Fire and Emergency Technology 1 or Fire and Emergency Technology 15 or equivalent; English 84 or eligibility for English 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 and tactics, and records and reports.

Fire and Emergency Technology 5
Fire Behavior and Combustion
3 units; 3 hours lecture
Recommended Preparation: Fire and Emergency Technology 1 or Fire and Emergency Technology 15 or equivalent; English 84 or eligibility for English 1A
Credit, degree applicable
Transfer CSU
This course discusses 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.

Fire and Emergency Technology 6
Building Construction for Fire Protection
3 units; 3 hours lecture
Recommended Preparation: Fire and Emergency Technology 1 or Fire and Emergency Technology 15 or equivalent; English 84 or eligibility for English 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.
Fire and Emergency Technology 7  
**Fire Protection Engineering**  
3 units; 3 hours lecture  
Recommended Preparation: Fire and Emergency Technology 1 or Fire and Emergency Technology 15 or equivalent; English 84 or eligibility for English 1A; Mathematics 40 or 33  
Credit, degree applicable  
Transfer CSU  
This course in fire protection engineering introduces hydraulic laws as applied to fire protection; the application of fire protection engineering; the calculation of fire protection demands in buildings; and the application of building components and approved fire protection systems.

Fire and Emergency Technology 8  
**Fire Service Hydraulics**  
3 units; 3 hours lecture  
Recommended Preparation: Fire and Emergency Technology 1 or Fire and Emergency Technology 15 or equivalent; English 84 or eligibility for English 1A; Mathematics 40 or 33  
Credit, degree applicable  
Transfer CSU  
This course covers the theory and practical application of the laws of water hydraulics used in the fire service. Included in the course are calculations for friction loss and flow in fire hoses, fire engine pump operations, and the general study of fluids at rest and in motion.

Fire and Emergency Technology 9  
**Apparatus and Equipment**  
3 units; 3 hours lecture  
Recommended Preparation: Fire and Emergency Technology 1 or Fire and Emergency Technology 15 or equivalent; English 84 or eligibility for English 1A  
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.

Fire and Emergency Technology 10  
**Hazardous Materials**  
3 units; 3 hours lecture  
Recommended Preparation: Fire and Emergency Technology 1 or Fire and Emergency Technology 15 or equivalent; Fire and Emergency Technology 14 or equivalent; English 84 or eligibility for English 1A  
Credit, degree applicable  
Transfer CSU  
This course is a study of fire fighting practices related to hazardous chemicals and their physical properties, uses in industry, and characteristics when involved in spills, fires, and accidents. It includes basic information regarding health effects and treatment as well as fire department protocols and responsibilities.

Fire and Emergency Technology 11  
**Arson Detection and Control**  
3 units; 3 hours lecture  
Recommended Preparation: Fire and Emergency Technology 1 or Fire and Emergency Technology 15 or equivalent; English 84 or eligibility for English 1A  
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.

*Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center advisor, or the articulation officer.*
Fire and Emergency Technology 19
Fire Service Entrance Preparation
3 units; 3 hours lecture
Recommended Preparation: Fire and Emergency Technology 1 or Fire and Emergency Technology 15 or equivalent; Technical Mathematics 1 or equivalent; English 84 or eligibility for English 1A
Credit, degree applicable
Transfer CSU
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.

Fire and Emergency Technology 20
Fire Protection Equipment and Systems
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 84 or English A
Credit, degree applicable
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.

Fire and Emergency Technology 50
Special Topics in Fire and Emergency Technology
1 units; 40 hours lecture (one week course)
Recommended Preparation: Fire and Emergency Technology 1 or Fire and Emergency Technology 14; Fire and Emergency Technology 60A
Credit, degree applicable
This course is designed to explore topics in Fire and Emergency Technology more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

Fire and Emergency Technology 60A
Hazardous Materials
2 units; 40 hours lecture (one week course)
Recommended Preparation: 1 year of high school or college chemistry
Credit, degree applicable
This course is an introduction to the chemical and physical properties of various chemicals and the hazards associated with each. The course is designed to meet the needs of Hazardous Materials Response Team members and fire prevention personnel. Students successfully completing this course receive Hazardous Materials Technician 1A certification.

*Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center advisor, or the articulation officer.
Fire and Emergency Technology 60F  
**Special HAZMAT Mitigation Techniques**  
1 unit; 10 hours lecture, 30 hours lab  
(1 week course)  
**Recommended Preparation:** Fire and Emergency Technology 60D  
**Credit, degree applicable**  
This course provides an overview of equipment and methods used to mitigate a hazardous materials emergency. The student will be exposed to various types of monitoring equipment, chemical protective clothing, incident operations, railroad and highway tank car, and field scenarios. Students successfully completing this course will receive California State Fire Marshal Hazardous Materials Technician 1F certification.

Fire and Emergency Technology 60G  
**HAZMAT Field Operations**  
1 unit; 10 hours lecture, 30 hours lab  
(1 week course)  
**Recommended Preparation:** Fire and Emergency Technology 60F  
**Credit, degree applicable**  
This course emphasizes mitigation techniques of hazardous materials emergencies in field settings. The student will participate as a member of a hazardous materials response team and will don chemical protective clothing and enter simulated hazardous environments. The majority of the course is devoted to hands-on training with tools and equipment used in hazardous materials abatement procedures. Students successfully completing this course will receive California State Fire Marshal Hazardous Materials Technician 1G certification.

Fire and Emergency Technology 99abc  
**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 - limitations apply**  
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 (60 hours per unit).  
**Note:** Refer to page 11 of this Catalog for eligibility requirements.

Fire and Emergency Technology 115A  
**Fire Academy I**  
7.5 units; 6 hours lecture, 5 hours lab  
**Prerequisite:** Fire and Emergency Technology 115A with a minimum grade of C or equivalent;  
2. Possess a valid California driver’s license  
3. Physical Education 8 or pass the Candidate Physical Agility Test (CPAT) or Biddle Physical Agility Test  
**Enrollment Limitation:**  
1. Pass a physical examination according to the National Fire Protection Association (NFPA) Standard #1582;  
2. Possess a valid California driver’s license  
**Credit, degree applicable**  
This is the first course of a two-course sequence for the student who wishes to prepare for entry level positions as a firefighter and become certified as a Fire Fighter 1 as specified by the California State Fire Marshal’s office. Emphasis is placed on fire behavior, basic fire fighting skills, structure fires, ventilation, vehicle fires, wildland fires, search and rescue operations, rappelling, fire apparatus, and fire equipment operation.  
**Note:** The two-course sequence of Fire and Emergency Technology 115A and 115B is the same as Fire and Emergency Technology 15. Students must apply through the Compton Community Education Center Office of Vocational Technology. Once acceptance into the academy has been verified, college registration will take place at the first class meeting.

Fire and Emergency Technology 115B  
**Fire Academy II**  
7 units; 5 hours lecture, 6 hours lab  
**Prerequisite:** Fire and Emergency Technology 115A with a minimum grade of C or equivalent  
**Enrollment Limitation:**  
1. Pass a physical examination according to the National Fire Protection Association (NFPA) Standard #1582;  
2. Possess a valid California driver’s license  
**Credit, degree applicable**  
This is the second course of a two-course sequence for the student who wishes to prepare for entry level positions as a firefighter and become certified as a Fire Fighter 1 as specified by the California State Fire Marshal’s office. Emphasis is placed on fire behavior, basic fire fighting skills, structure fires, ventilation, vehicle fires, wildland fires, search and rescue operations, rappelling, fire apparatus, and fire equipment operation.  
**Note:** The two-course sequence of Fire and Emergency Technology 115A and 115B is the same as Fire and Emergency Technology 15. Students must apply through the Compton Community Education Center Office of Vocational Technology. Once acceptance into the academy has been verified, college registration will take place at the first class meeting.

Fire and Emergency Technology 128  
**Paramedic Preparation Course**  
3 units; 16 hours lecture (4 weeks course)  
**Recommended Preparation:** six months experience as an Emergency Medical Technician (EMT) or equivalent  
**Credit, degree applicable**  
**Transfer CSU - limitations apply**  
This is a preparatory course designed to increase the success of candidates for paramedic training. The topics covered in the course include: medical terminology, anatomy, respiratory system, cardiovascular system, nervous system, pharmacology, electrophysiology and the pathophysiology of shock. Case studies and patient simulations will be utilized to reinforce learning.  
**Note:** Letter grade or P/NP option.

Fire and Emergency Technology 130  
**Basic Prehospital Care Principles**  
2 units; 3 hours lecture (15 weeks course)  
**Enrollment Limitation:** admission to Paramedic 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.
Fire and Emergency Technology 131

Field Assessing and Reporting
1.5 units; 2 hours lecture, 1 hour lab
(13 weeks course)
Enrollment Limitation: admission to Paramedic Technician Program
Credit, degree applicable

This course covers assessment techniques used in a non-hospital/non-clinical setting. The necessity of obtaining complete and accurate vital signs is stressed. Trauma assessment is discussed and demonstrated.

Fire and Emergency Technology 132

Prehospital Care Pharmacology
1.5 units; 2 hours lecture, 1 hour lab
(13 weeks course)
Enrollment Limitation: admission to Paramedic 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.

Fire and Emergency Technology 133

Basic and Advanced Life Support
6.5 units; 9 hours lecture (13 weeks course)
Enrollment Limitation: admission to Paramedic 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.

Fire and Emergency Technology 134

Medical Emergencies
4 units; 6 hours lecture, 1 hour lab
(13 weeks course)
Enrollment Limitation: admission to Paramedic 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.

Fire and Emergency Technology 135

Traumatic Emergencies
2 units; 3 hours lecture (13 weeks course)
Enrollment Limitation: admission to Paramedic 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 multi-casualty incidents.

Fire and Emergency Technology 136

Special Patient Emergencies
2 units; 3 hours lecture (13 weeks course)
Enrollment Limitation: admission to Paramedic Technician Program
Credit, degree applicable

This course focuses on emergencies which involve unresponsive patients, pediatrics to geriatrics, and methods for resuscitating these victims. Discussions include obstetrical and behavioral problems as well as circumstances surrounding paramedic critical incident stress.

Fire and Emergency Technology 137

Emergency Medical Services (EMS)/Legal Aspects/Documentation
2 units; 3 hours lecture, 1 hour lab
(13 weeks course)
Enrollment Limitation: admission to Paramedic 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.

Fire and Emergency Technology 138

Paramedic Clinical Internship
3 units; 40 hours lab per week
(4 weeks course)
Prerequisite: Fire and Emergency Technology 130, 131, 132, 133, 134, 135, 136 and 137 with a minimum grade of C in each prerequisite course
Enrollment Limitation: admission to Paramedic 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.

Fire and Emergency Technology 139

Paramedic Field Internship
8.5 units; 60 hours lab per week
(8 weeks course)
Prerequisite: Fire and Emergency Technology 138 with a minimum grade of C
Enrollment Limitation: admission to Paramedic 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.

Fire and Emergency Technology 140

Emergency Medical Technician
4 units; 4 hours lecture
Corequisite: enrollment in Fire and Emergency Technology 141
Credit, degree applicable
Transfer CSU

In this course, students will study the basic skills necessary for the assessment, rescue, immediate treatment, and transport of the urgently ill or injured persons. Course content emphasizes identifying and correcting life-threatening conditions, identifying appropriate rescue techniques, and developing a systematic approach for providing pre-hospital care.

Note: Students must show proof of current certification in Health Care Provider CPR or Professional Rescuer CPR from the American Heart Association or the American Red Cross at the first class meeting. Completion of this course and Fire and Emergency Technology 141, both with a grade of B or above, will make the student eligible to take the National Registry EMT exam.

Note: This course is repeatable.

*Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center advisor, or the articulation officer.
In this course, students will develop and practice basic skills necessary for the assessment, rescue, immediate treatment, and transport of the urgently ill or injured persons. Course content emphasizes identifying and correcting life-threatening conditions, applying appropriate rescue techniques, and developing a systematic approach for providing pre-hospital care. Work outside of class includes ten hours of service in a prescribed hospital emergency room, and twelve hours of service on an active ambulance.

Note: Students must show proof of current certification in Health Care Provider CPR or Professional Rescuer CPR from the American Heart Association or American Red Cross at the first class meeting. Once enrolled, students must undergo a criminal background check to qualify for the required out-of-class activities. Completion of this course and Fire and Emergency Technology 140, both with a grade of B or above, will make the student eligible to take the National Registry EMT exam.

Fire and Emergency Technology 142abcd
Basic Emergency Medical Technician Recertification
1.5 units; 1.5 hours lecture
Prerequisite: Fire and Emergency Technology 140 and 141 with a minimum grade of C in prerequisite or equivalent course work taken within the past 3 years.
Credit, degree applicable
Transfer CSU
This is a refresher course for those in need of recertification as a basic Emergency Medical Technician (EMT). This course is designed to present the student with updated and new technology in the areas of emergency pre-hospital care.
## French – A.A. Degree

*Humanities Division*

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.

### El Camino College Major Requirements

French 1, 2, 3, 4; French 21ab and French 22ab or one course from: Art 3, 4, English 15A, 15B, 35, 36, History 140, 141  
Total Units: 19-20

### Preparation for the 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.

### French

#### French 1

**Elementary French I**  
4 units; 5 hours lecture  
Recommended Preparation: eligibility for English A  
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.*

#### French 2

**Elementary French II**  
4 units; 5 hours lecture  
Prerequisite: French 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.*  
*Note: This course parallels French 150, USC.*

#### French 3

**Intermediate French I**  
4 units; 5 hours lecture  
Prerequisite: French 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 materials of representative French authors.  
*Note: The prerequisite for this course is comparable to three years of high school French.*

#### French 4

**Intermediate French II**  
4 units; 5 hours lecture  
Prerequisite: French 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 materials of representative French authors and participate in daily conversations.  
*Note: The prerequisite for this course is comparable to four years of high school French.*

#### French 5

**Advanced French I**  
3 units; 3 hours lecture  
Prerequisite: French 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 French writers. Students read and summarize the works of representative French writers to acquire fluency in the language. Written French, with an emphasis on vocabulary building and functional grammar, is also included.  

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*Some UC transferable courses have credit limitations.  
For details, see a counselor, the Transfer Center advisor, or the articulation officer.*

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The hours per week of courses may be adjusted based on the length of the term.
French 6
**Advanced French II**
3 units; 3 hours lecture  
Prerequisite: French 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, introduces students to French literary criticism. Students learn how to write critically about the works of representative French writers to acquire fluency in the language. Written French, with an emphasis on vocabulary building and functional grammar, is also included.

French 21ab
**Beginning Conversational French**
2 units; 2 hours lecture  
Prerequisite: French 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.

French 22ab
**Intermediate Conversational French**
2 units; 2 hours lecture  
Prerequisite: French 2, French 21ab 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.

French 24
**Introduction to French and Francophone Cultures**
3 units; 3 hours lecture  
Recommended Preparation: eligibility for English 1A  
Credit, degree applicable  
Transfer CSU, UC  
This course provides an introduction to the cultural aspects of the French language through a study of French and Francophone culture, geography, social institutions, literature, art, architecture, and music. Topics include a comparison of French and other Western languages and cultures.

French 50
**Special Topics in French**
Units determined by individual course; lecture/lab hours determined by individual course  
Credit status determined by individual course  
This course is designed to explore topics in French more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

French 99abc
**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, UC - limitations apply  
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 (60 hours per unit).  
Note: Refer to page 11 of this Catalog for eligibility requirements.

General Science – A.S. Degree  
[Natural Sciences Division]  
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.

El Camino College Major Requirements  
One of the following two-semester sequences: Biology 101-102, Chemistry 1A-1B, Chemistry 21A-21B, Physics 1A-1B, Physics 1A-1C, Physics 2A-2B, Physics 3A-3B; an additional 10-13 units from the following courses to reach a total of 20 units: at least one Physical Science course: Astronomy 20, 25, 12, Chemistry 1A, 1B, 4, 21A, 21B, Geology 1, 2, 3, 4, 15; at least one Biological Science course: Anatomy 32, Biology 8, 10, 11, 12, 16, 17, 18, 101, 102, Microbiology 33, Physiology 31

2010-2011 El Camino College Catalog
General Studies – A.A. Degree  
(behavioral and social sciences division)  

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

A. General Education: choose one of the following patterns
1. AA General Education Requirements (minimum of 24 units and the math competency)
2. CSU GE Breadth (39 units) - This general education pattern will fulfill lower-division general education requirements at the CSU campuses.
3. IGETC (34 units) - This general education pattern will fulfill lower-division requirements at the CSU, UC and some private colleges and universities.

B. 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 GE Breadth, or IGETC.

C. Electives:
Elective units may be necessary to obtain the 60 degree applicable units that are required for the Associate Degree.

1. 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, history, 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:
Architecture 104;
Art 1, 2, 3, 4, 5A, 5B, 6, 7, 9, 108, 150;
Dance 1, 3, 5; Film/Video 1, 3;
Music 1, 11, 12, 13, 15A, 15B;
Theatre 1, 4, 8

Humanities:
Sign Language/Interpreter Training 15, 16, 17A, 17B;
Film/Video 52, 53, 54abc;
History of Science 11;
Humanities 1;
Journalism 1, 12;

(continued on next page)
General Studies

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Languages:
Chinese 1, 2, 24;
Italian 1, 2, 24;
Japanese 1, 2, 3, 4, 25;
French 1, 2, 3, 4, 5, 6, 24, 35;
German 1, 2, 3;
Spanish 1, 2, 3, 4, 5, 6, 24, 52A, 52B;
Philosophy 2, 3, 5, 7, 8, 10, 11, 23;
Communication Studies 1, 3, 4, 5, 8, 9, 12, 14

2. 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.
Architecture, 104, 150A, 150B, 199ab;
Art 1, 2, 3, 4, 5A, 5B, 6, 7, 9, 10ab, 11abcd, 17ab, 18abcd, 19ab, 22ab, 23abcd, 31abcd, 37ab, 41ab, 61ab, 82abcd, 141abcd, 142abcd, 143abcd;
Dance 1, 3, 5, 22ab, 23abcd, 32ab, 33abcd, 42ab, 43abcd;
English 24A, 24B, 25A, 32abc, 38;
Film/Video 1, 3, 4, 20, 21, 22, 23, 32ab, 52, 53, 54abc;
Music 1, 2A, 2B, 3A, 3B, 3C, 7, 8A, 8B, 11, 12, 13, 15A, 15B, 18ab, 19abcd, 23abcd, 31A, 31B, 31C, 31D;
Photography 1, 2, 51, 150;
Theatre 1, 4, 8, 14A, 14B, 30, 84, 88, 90, 94

3. 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.
Anthropology 4;
Art 143abcd;
Film/Video 20, 22, 24, 28ab, 32ab, 52, 53, 54abc;
Journalism 1, 12;
Library Information Science 1, 10;
Photography 1, 11ab, 51;
Languages:
Sign Language/Interpreter Training 15, 16, 17A, 17B;
Chinese 1, 2, 24;
Italian 1, 2, 24;
Japanese 1, 2, 3, 4, 25;
French 1, 2, 3, 4, 5, 6, 24, 35;
German 1, 2, 3;
Spanish 1, 2, 3, 4, 5, 6, 24, 52A, 52B;
Communication Studies 1, 3, 4, 5, 8, 9, 12, 14

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4. **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.
- Administration of Justice 100, 103, 107, 111, 115;
- American Studies 7;
- Anthropology 2, 3, 4, 6, 7, 8, 9, 10, 11;
- Child Development 103, 104;
- Economics 1, 2, 5;
- Education 201;
- Geography [excluding physical geography] 2, 5, 7;
- History of Science 11;
- Political Science 1, 2, 3, 5, 6, 8, 10;
- Psychology 2, 3, 5, 7, 8, 9A, 9B, 10, 12, 15, 16, 21, 22 [same as Physical Education 275];
- Sociology 101, 102, 104, 107, 109, 110, 112

5. **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 Science and one course from Physical Science.
- **Biological Sciences**:
  - Anatomy 30, 32;
  - Anthropology 1, 5;
  - Biology 8, 10, 11, 12, 15, 16, 17, 18, 101, 102, 103;
  - Microbiology 33;
  - Physiology 31
- **Physical Sciences**:
  - Astronomy 12, 20, 25;
  - Chemistry 4, 1A, 1B, 7A, 7B, 20, 21A, 21B;
  - Geography 1, 6, 9;
  - Geology 1, 2, 3, 4, 6, 15, 30, 32, 34, 36;
  - Oceanography 10;
  - Physics 1A, 1B, 1C, 1D, 2A, 2B, 3A, 3B, 11, 12;
  - Physical Science 25

[continued on next page]
**General Studies**

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6. **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.

6 units from Physical Education:
Physical Education 217, 270, 272, 275, 277, 280, 290

3 units from Science and/or Nutrition:
Anatomy 30, 32
Biology 10, 101, 102
Chemistry 1A, 4, 20, 21A, 21B
Microbiology 33
Nutrition and Foods 11
Physics 11, 2A, 2B
Physiology 31

3 units from Social Sciences and/or Development:
Contemporary Health 1
Human Development 10
Psychology 5
Sociology 101

**Elective Courses:**
First Aid 1
Fire and Emergency Technology 140, 141
Nutrition and Foods 15
Psychology 2, 12, 16

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**Geography**

**Geography 1**

**Physical Elements**

3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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.

**Geography 2**

**Cultural Geography**

3 units; 3 hours lecture
Recommended Preparation: eligibility for English 84
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.

**Geography 5**

**World Regional Geography**

3 units; 3 hours lecture
Recommended Preparation: eligibility for English 84
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.

**Geography 6**

**Physical Geography Laboratory**

1 unit; 3 hours lab
Prerequisite: Geography 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.
This course focuses on the physical, cultural, and economic elements of geographic regions. Field study is usually conducted over a four day period. Note: Participants' fees required for camping and meals.

**Special Topics in Geography**
Units determined by individual course; lecture/lab hours determined by individual course
Credit status determined by individual course
This course is designed to explore topics in Geography more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

**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, UC
This course provides the student an opportunity to explore research problems in Geography not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned laboratory work and/or research projects (60 hours per unit). Note: Refer to page 11 of this Catalog for eligibility requirements.

*Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center advisor, or the articulation officer.

**History of Planet Earth**
3 units; 3 hours lecture
Recommended Preparation: English 84
Credit, degree applicable
Transfer CSU, UC
This course presents a study of the history of the Earth since the time of its formation to the present day. The course will integrate 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 will also be covered. Note: 4 units of laboratory science credit will be granted with concurrent or subsequent enrollment in a geology laboratory course.

**Physical Geology**
3 units; 3 hours lecture
Recommended Preparation: English 84
Credit, degree applicable
Transfer CSU, UC
This course provides an introduction to the materials, structures, and processes that shape the earth. The course includes a survey of minerals and rocks, a study of plate tectonics and the forces that create volcanism and earthquakes, and a study of topographic features created by streams, landslides, ground water, glaciers, wind, and ocean waves. Note: 4 units of laboratory science credit will be granted with concurrent or subsequent enrollment in a geology laboratory course.

**Independent Study**
1-3 units; hours to be arranged
Enrollment Limitation: two courses in Geology with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work
Credit, degree applicable
Transfer CSU, UC
This course provides the student an opportunity to explore research problems in Geology not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned laboratory work and/or research projects (60 hours per unit). Note: Refer to page 11 of this Catalog for eligibility requirements.

*Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center advisor, or the articulation officer.

**History of Planet Earth**
3 units; 3 hours lecture
Recommended Preparation: English 84
Credit, degree applicable
Transfer CSU, UC
This course presents a study of the history of the Earth since the time of its formation to the present day. The course will integrate 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 will also be covered. Note: 4 units of laboratory science credit will be granted with concurrent or subsequent enrollment in a geology laboratory course.

**Physical Geology**
3 units; 3 hours lecture
Recommended Preparation: English 84
Credit, degree applicable
Transfer CSU, UC
This course provides an introduction to the materials, structures, and processes that shape the earth. The course includes a survey of minerals and rocks, a study of plate tectonics and the forces that create volcanism and earthquakes, and a study of topographic features created by streams, landslides, ground water, glaciers, wind, and ocean waves. Note: 4 units of laboratory science credit will be granted with concurrent or subsequent enrollment in a geology laboratory course.

**Independent Study**
1-3 units; hours to be arranged
Enrollment Limitation: two courses in Geology with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work
Credit, degree applicable
Transfer CSU, UC
This course provides the student an opportunity to explore research problems in Geology not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned laboratory work and/or research projects (60 hours per unit). Note: Refer to page 11 of this Catalog for eligibility requirements.

Geography 7
Geography of California
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 84
Credit, degree applicable
Transfer CSU, UC
This course is a systematic study of California’s unique and diverse physical environments and associated land forms, climates, and ecological communities. An overview of human settlement patterns, economic activities, and cultural aspects, with an emphasis on physical environment-human occupancy relationships, will also be discussed.

Geography 8
Introduction to Geographic Information Systems
4 units; 3 hours lecture, 3 hours lab
Recommended Preparation: 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, map features, map overlays, creation of charts and graphs, and the presentation of data in map layouts.

Geography 9
Weather and Climate
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 84
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.

Geography 20abcd
Geography Field Studies
1 unit; 0.5 hour lecture, 1.5 hours lab
Recommended Preparation: eligibility for English 84
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: Participants’ fees required for camping and meals.

Geology – A.S. Degree
[Natural Sciences Division]
The program is designed to provide students the opportunity to obtain a degree upon successful completion of the requirements of a geology transfer major. 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.

Preparation for the 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.

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Geology 3
**Physical Geology Laboratory**
1 unit; 3 hours lab
Prerequisite: Geology 1 with a minimum grade of C or concurrent enrollment
Credit, degree applicable
Transfer CSU, UC
This course is a laboratory study of geologicic 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.

Geology 4
**History of Planet Earth Laboratory**
1 unit; 3 hours lab
Prerequisite: Geology 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 sedimentary rocks and fossils and their use in interpreting earth history, age relationships and paleogeography of selected regions.

Geology 6
**Earth Science in Education**
4 units; 3 hours lecture, 3 hours lab
Recommended Preparation: English 84
Credit, degree applicable
Transfer CSU
This course is a broad-based introductory study of earth science for future kindergarten through 8th grade teachers 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 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, and earthquakes.

*Note: Geology 6 is not designed for geology or earth science majors.

The hours per week of courses may be adjusted based on the length of the term.

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Geology 15
**Natural Disasters**
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 84
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.

Geology 30
**Geology Laboratory of Death Valley**
1 unit; 3 hours lab to be arranged
Prerequisite: Geology 1 with a minimum grade of C or concurrent enrollment
Recommended Preparation: English 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, Geology 32, Geology 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.
Note: UC does not accept Geology 30, 32, 34, or 36 for the Physical Science laboratory requirement.

Geology 32
**Geology Laboratory of Owens Valley and Sierra Nevada**
1 unit; 3 hours lab to be arranged
Prerequisite: Geology 1 with a minimum grade of C or concurrent enrollment
Recommended Preparation: English 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: Credit may be earned in Geology 30, Geology 32, Geology 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.
Note: UC does not accept Geology 30, 32, 34, or 36 for the Physical Science laboratory requirement.

Geology 34
**Geology Laboratory of Southeastern California**
1 unit; 3 hours lab
Prerequisite: Geology 1 with a minimum grade of C or concurrent enrollment
Recommended Preparation: English 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.

*Note: Credit may be earned in Geology 30, Geology 32, Geology 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.
Note: UC does not accept Geology 30, 32, 34, or 36 for the Physical Science laboratory requirement.

Geology 36
**Geology Laboratory of Coastal California**
1 unit; 3 hours lab
Prerequisite: Geology 1 with a minimum grade of C or concurrent enrollment
Recommended Preparation: English 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 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 Geology 30, Geology 32, Geology 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.
Note: UC does not accept Geology 30, 32, 34, or 36 for the Physical Science laboratory requirement.

Geology 50
**Special Topics in Geology**
Units determined by individual course; lecture/lab hours determined by individual course
Credit status determined by individual course
This course is designed to explore topics in Geology more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

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This course, taught within the context of German 2, Internet access to publishers’ websites for relationships among cultural practices and Students are also introduced to the culture and language skills acquired in the classroom. 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 three years of high school German.

German 2

Elementary German II
4 units; 5 hours lecture
Prerequisite: German 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. 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 German.

Global Studies

Global Studies 101
Introduction to Global Studies
3 units; 3 hours lecture
Credit, degree applicable
Transfer CSU, UC

This course offers a global introduction to world cultures. Students will be introduced to global cultures by examining the theoretical approaches to understanding cultures around the world in relation to the United States. Emphasis is placed on analyzing the origins of different cultures, how and why they change, and their impact on individuals and societies.

Note: This course is taught collaboratively with international partners and utilizes interactive Web-based video as well as chat and e-mail contact.

Health Education

See Contemporary Health

History

History 50
Special Topics in History
Units determined by individual course; lecture/lab hours determined by individual course
Credit status determined by individual course

This course is designed to explore topics in History more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

History 99abc

Independent Study
1-3 units; hours to be arranged
Enrollment Limitation: two courses in History with a minimum grade of B in each and acknowledgment by the instructor with whom student will work
Credit, degree applicable
Transfer CSU, UC - limitations apply

This course provides advanced studies in a subject field of History not covered in the regular departmental offerings. Regular conferences will be held with the instructor to discuss and coordinate the assigned projects (60 hours per unit).

Note: Refer to page 11 of this Catalog for eligibility requirements.
### History – A.A. Degree

*(Behavioral and Social Sciences Division)*

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.

#### El Camino College Major Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Hours Lecture</th>
<th>Recommended Preparation</th>
<th>Credit, degree applicable</th>
<th>Transfer CSU, UC*</th>
</tr>
</thead>
<tbody>
<tr>
<td>History 101</td>
<td>United States History to 1877</td>
<td>3</td>
<td>3</td>
<td>eligibility for English 1A</td>
<td>Credit, degree applicable</td>
<td></td>
</tr>
<tr>
<td>History 102</td>
<td>United States History from 1877 to the Present</td>
<td>3</td>
<td>3</td>
<td>eligibility for English 1A</td>
<td>Credit, degree applicable</td>
<td></td>
</tr>
<tr>
<td>History 104</td>
<td>History of the United States to 1877</td>
<td>3</td>
<td>3</td>
<td>eligibility for English 1A</td>
<td>Credit, degree applicable</td>
<td></td>
</tr>
<tr>
<td>History 105</td>
<td>United States History: The American Indian Experience</td>
<td>3</td>
<td>3</td>
<td>eligibility for English 1A</td>
<td>Credit, degree applicable</td>
<td></td>
</tr>
<tr>
<td>History 106</td>
<td>Women and American History from 1877 to the Present</td>
<td>3</td>
<td>3</td>
<td>eligibility for English 1A</td>
<td>Credit, degree applicable</td>
<td></td>
</tr>
<tr>
<td>History 107</td>
<td>American Modern History</td>
<td>3</td>
<td>3</td>
<td>eligibility for English 1A</td>
<td>Credit, degree applicable</td>
<td></td>
</tr>
<tr>
<td>History 108</td>
<td>United States History: The African American in the United States to 1877</td>
<td>3</td>
<td>3</td>
<td>eligibility for English 1A</td>
<td>Credit, degree applicable</td>
<td></td>
</tr>
</tbody>
</table>

Total Units: 21

#### Preparation for the 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.

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**History 101**

(formerly History 1A)

**United States History to 1877**

3 units; 3 hours lecture  
Recommended Preparation: eligibility for English 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 102 and History 110 and 111 and/or History 105 and 106 is one series.

**History 102**

(formerly History 1B)

**United States History from 1877 to the Present**

3 units; 3 hours lecture  
Recommended Preparation: eligibility for English 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 History 101 and 102 and History 110 and 111 and/or History 105 and 106 is one series.

**History 105**

(formerly History 18A)

**Women and American History from the Colonial Era to 1877**

3 units; 3 hours lecture  
Recommended Preparation: eligibility for English 1A  
Credit, degree applicable  
Transfer CSU, UC*

This course is a chronological survey of the history of the United States from the colonial period through the era of reconstruction with special emphasis on the role of women in the shaping of American society. The contributions of women to the political, economic, and social development of the nation will be emphasized.

* Note: The maximum UC credit allowed for students completing History 105 and 106 and History 101 and 102 and/or History 110 and 111 is one series.

**History 106**

(formerly History 18B)

**Women and American History from 1877 to the Present**

3 units; 3 hours lecture  
Recommended Preparation: eligibility for English 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 role of women in shaping American society. The contributions of women to the economic, political, and social development of the nation will be examined.

* Note: The maximum UC credit allowed for students completing History 110 and 111 and History 101 and 102 and/or History 105 and 106 is one series.
History 111
(formerly History 16B)
**The African American in the United States from 1877 to the Present**
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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.

History 112
(formerly History 17)
**History of the Chicano in the United States**
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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.

History 114
**History of the Asian American in the United States**
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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.

History 122
(formerly History 32)
**United States Social History: Cultural Pluralism in America**
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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.

History 128
(formerly History 8)
**History of California**
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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.

History 129
(formerly History 27)
**History of Los Angeles**
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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 Californians to the present. Topics will 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 serves as a destination for diverse immigrant populations and a center of international commerce.

History 140
(formerly History 3)
**History of Early Civilizations**
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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.

History 141
(formerly History 4)
**History of Modern Civilizations**
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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.

History 143
(formerly History 22)
**Twentieth Century World History**
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 1A
Credit, degree applicable
Transfer CSU, UC

This course examines the political, economic, and social development of the world from the beginnings of World War I to the present. Focus is placed on the factors that contributed to the outbreak of World War I and World War II and issues that remained unresolved by their treaties. New challenges introduced by these conflicts will be examined including the Cold War, decolonization and state building in Africa and Asia, the collapse of the Union of Soviet Socialist Republics (USSR), and the world's increasing interdependence.
### History 145
(formerly History 37)
**History of World Religions**
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 1A
Credit, degree applicable
Transfer CSU, UC
This course is an introduction to the origins, essential doctrines, and historical development of the world’s major religious traditions from prehistory to today and their impact on the societies in which they appear. Major religions examined include Judaism, Hinduism, Buddhism, Christianity, and Islam.

### History 152
**History of Latin America through Independence**
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 1A
Credit, degree applicable
Transfer CSU, UC
This course will survey 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 covered in this course include the Native American world before European conquest, the socioeconomic, political and cultural 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.

### History 154
(formerly History 19)
**A History of Mexico**
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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.

### History 162
(formerly History 5A)
**History of Early Britain**
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 1A
Credit, degree applicable
Transfer CSU, UC
This course focuses on the political, economic, social, and cultural development of Britain from earliest times to the 17th century. Topics include the emergence of common law and representative government, the evolution of England as a major power based on maritime and commercial supremacy, and the foundations of the British Empire. Cultural development from the English Renaissance and Baroque periods will also be examined.

### History 163
(formerly History 5B)
**History of Modern Britain**
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 1A
Credit, degree applicable
Transfer CSU, UC
This course focuses on the political, social and cultural development of Great Britain from the 17th century to the present. Topics include the expansion and decline of the British empire, the evolution of democratic institutions and political thought, the Industrial Revolution, the World Wars, and Britain’s relationship to the European community. Cultural development from the Neoclassical to the Victorian and contemporary periods also are examined.

### History 165
(formerly History 25)
**History of Modern Germany, 1866 to the Present**
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 1A
Credit, degree applicable
Transfer CSU, UC
This course is a survey of the political, economic, social, and cultural development of Germany from the time of unification in the mid-nineteenth century through the reunification of the post-Cold War period. This course will also consider the problems and historical patterns that characterize contemporary Germany.

### History 175
(formerly History 14A)
**History of Asian Civilizations to 1600**
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 1A
Credit, degree applicable
Transfer CSU, UC
This course surveys the political, economic, social, and cultural development of Asian civilizations from earliest times to 1600. Emphasis is placed on the experiences of India, China, Japan, Korea, and Southeast Asia and their interactions. Topics include the emergence of the earliest Asian civilizations, the development of major religious and philosophical traditions, the rise of regional and imperial states, and the impact of early contacts with the West.

### History 176
(formerly History 14B)
**History of Asian Civilizations from 1600 to the Present**
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 1A
Credit, degree applicable
Transfer CSU, UC
This course surveys the political, economic, social, and cultural development of Asian civilizations from the 17th century to the present. Emphasis is placed on the experiences of India, China, Japan and Korea and their regional and global interactions. Topics include the impact of Western imperialism on these countries, the response to Western dominance and influence, and the emergence of these societies as modern nation-states.

### History 177
(formerly History 30)
**History of Japan**
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 1A
Credit, degree applicable
Transfer CSU, UC
This course surveys the history of Japan from earliest times to the present day. Focus will be placed on the origins and evolution of major cultural, social, economic, and political traditions and institutions. The influence of China and the West in the formation of Japanese values and politics will also be emphasized.

*Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center advisor, or the articulation officer.*

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History 178

**History of China**
3 units; 3 hours lecture
Recommended Preparation: eligibility for
English 1A
Credit, degree applicable
Transfer CSU, UC
This course provides an introduction to the political, economic, social, and cultural development of China from earliest times to the present. Topics include Confucianism, Daoism, Buddhism, Western Imperialism, and the Republican and Communist Revolutions.

History 183
(formerly History 12A)

**Introduction to African History, Prehistory to 1885**
3 units; 3 hours lecture
Recommended Preparation: eligibility for
English 1A
Credit, degree applicable
Transfer CSU, UC
This course is a survey of Africa from human evolution to the eve of colonial rule. Emphasis will be given to the political, economic, and social development of the African continent. Topics to be analyzed include African trade relations with Europe and the world, the influences of Christianity and Islam in Africa, the Transatlantic slave trade, African Diaspora, and early European incursions.

History 184
(formerly History 12B)

**Introduction to African History, 1885 to the Present**
3 units; 3 hours lecture
Recommended Preparation: eligibility for
English 1A
Credit, degree applicable
Transfer CSU, UC
This course is a survey of the political, economic and social development of Africa from 1885 to the present. Special emphasis will be given to colonial conquest and African resistance to European rule, influence of Christian missionaries and Islam in Africa, the striving for independence and decolonization, and the struggle against apartheid in South Africa.

History 190

**History of the Middle East**
3 units; 3 hours lab
Recommended Preparation: eligibility for
English 1A
Credit, degree applicable
Transfer CSU
This course provides an introduction to the political, economic, social, and cultural development of the Middle East from the earliest civilizations to the present. Topics include Muhammad and the origins of Islam, the early Islamic Empires, the development of Islamic civilization, and state building in the modern era.

**History of Science**

History of Science 11

**Introduction to the History of Western Science**
3 units; 3 hours lecture
Recommended Preparation: eligibility for
English 1A
Credit, degree applicable
Transfer CSU, UC
In this course the major ideas and organizing theories of the scientific revolutions in astronomy, physics, chemistry, biology, and geology are introduced. The professional and personal lives of the scientists responsible for each revolution are discussed. Scientists covered include Galileo Galilei, Isaac Newton, Albert Einstein, and Charles Darwin. A brief introduction to the methods, philosophy, and content of science is also included and an example of a contemporary scientific revolution is also discussed.
Note: This course is primarily for the non-science major. No mathematics or previous science background is required.

Human Development

**Human Development 5**

**Career and Life Planning**
1 unit; 1 hour lecture
Recommended Preparation: English 84 or
ESL 52C and English A or English A-X
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.
Note: Pass/no pass only

**Human Development 8**

**Orientation to College and Educational Planning**
1 unit; 1 hour lecture
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.

**Human Development 10**

**Strategies for Creating Success in College and in Life**
3 units; 3 hours lecture
Recommended Preparation: English 84 or
ESL 52C or English A or English A-X
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.
Human Development 12  
**Strategies for Success in the Workplace**  
1 unit; 1 hour lecture  
Credit, not degree applicable  
This course will provide students with the knowledge, skills and personal/interpersonal awareness necessary for success in the workplace. Students will learn resume writing and interviewing skills, workplace roles and responsibilities, strategies for effective time management and effective workplace communication. Emphasis will be placed on identifying professional behaviors and values for success in the workplace.

Human Development 15  
**Student Athlete Orientation to College and Educational Planning**  
2 units; 2 hours lecture  
Recommended Preparation: eligibility for English 84  
Credit, degree applicable  
Transfer CSU  
This course provides student athletes with the knowledge, skills, and self-awareness necessary for success in college. The student athlete becomes familiar with eligibility rules required to participate in intercollegiate athletics and transfer requirements to four-year institutions. Students are introduced to services and resources on campus, develop time management and study skills, and design a personalized educational plan.  
*Note: This course is open to all students.*

Human Development 20  
**Navigating the Transfer Process**  
1 unit; 1 hour lecture  
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.  
*Note: Letter grade or P/NP option.*

Human Development 50  
**Special Topics in Human Development**  
Units determined by individual course; lecture/lab hours determined by individual course  
Credit status determined by individual course  
This course is designed to explore topics in Human Development more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

Human Development 95ab  
**Cooperative Work Experience Education**  
2-3 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 course from the major.  
Credit, degree applicable  
Transfer CSU - limitations apply  
Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Human Development 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 CWEE may not exceed 16 units.*

Humanities 1  
**An Introduction to the Humanities**  
3 units; 3 hours lecture  
Recommended Preparation: eligibility for English 84  
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.

Humanities 50  
**Special Topics in Humanities**  
Units determined by individual course; lecture/lab hours determined by individual course  
Credit status determined by individual course  
This course is designed to explore topics in Humanities more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

Industrial Arts  
See Machine Tool Technology
**Industrial Technology – A.S. Degree**

*Industry and Technology Division*

The industrial technology program is designed to prepare students for transfer to programs in engineering technology or industrial technology. By completing the transfer requirements, students acquire a foundation in mathematics, chemistry, physics, computer-aided design and drafting, computer aided manufacturing, machine tool operation, and electronics. Competencies will be assessed regularly by student performance in the classroom and laboratory. Industrial technologists are employed in a wide range of careers including managers, management representatives, administrators, production supervisors, trainers, technical support specialists, and technology educators.

**Preparation for the 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.

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**Italian**

**Italian 1**

*Elementary Italian I*

4 units; 5 hours lecture
Recommended Preparation: eligibility for English A
Credit, degree applicable
Transfer CSU, UC

This course introduces students to speaking, listening, reading and writing linguistically appropriate Italian. 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 Italian.*

**Italian 2**

*Elementary Italian II*

4 units; 5 hours lecture
Prerequisite: Italian 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. 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 Italian.*

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**Italian 21ab**

*Beginning Conversational Italian*

2 units; 2 hours lecture
Prerequisite: Italian 1 with a minimum grade of C or equivalent
Credit, degree applicable
Transfer CSU, UC

This course is designed to develop fluency in oral expression, increase oral comprehension, and improve pronunciation of the Italian language. Conversational topics are based upon the daily experiences and cultural life of the ethnic areas involved with the Italian language.

**Italian 22ab**

*Intermediate Conversational Italian*

2 units; 2 hours lecture
Prerequisite: Italian 2 and 21ab 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 fluency in oral expression, increase Italian oral comprehension, and improve Italian pronunciation. Conversational topics are based upon the daily experiences and cultural life of the ethnic areas involved with the Italian language.

**Italian 24**

*Introduction to Italian Culture*

3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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.

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*Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center advisor, or the articulation officer.*

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Japanese – A.A. Degree

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.

El Camino College Major Requirements

Japanese 1, 2, 3, 4 and 25; one course from: Japanese 21ab or 22ab; one course from: Anthropology 2, Art 5B, English 35, 36, History 175, 176, 177, Philosophy 7, Political Science 2, 10, Psychology 8, Sociology 104

Eleven of the required units must be completed at El Camino College.
Total Units: 24

Preparation for the 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

Japanese 1

**Elementary Japanese I**

4 units; 5 hours lecture
Recommended Preparation: eligibility for English A
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 Japanese. Students are also introduced to the cultural background of the language, including relationships among cultural practices and perspectives and the general aspects of every day life. Technological support includes 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 Japanese.

The hours per week of courses may be adjusted based on the length of the term.

Japanese 2

**Elementary Japanese II**

4 units; 5 hours lecture
Prerequisite: Japanese 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. It begins with an emphasis on listening, speaking, reading and writing. Students improve their pronunciation and speaking skills along with their understanding of spoken Japanese. 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 Japanese.

Japanese 3

**Intermediate Japanese I**

4 units; 5 hours lecture
Prerequisite: Japanese 2 with a minimum grade of C or equivalent
Credit, degree applicable
Transfer CSU, UC

This intermediate course, taught within the context of Japanese culture, emphasizes the study of the essentials of Japanese grammar and the fundamentals of formal Japanese composition. Through oral and written practice, students expand their Japanese vocabulary and use of idiomatic expressions. Students read materials drawn from daily life.

**Note:** The prerequisite for this course is comparable to three years of high school Japanese.

The student who has completed two or more years of Japanese in high school will have the opportunity to enroll with advanced standing.

Japanese 4

**Intermediate Japanese II**

4 units; 5 hours lecture
Prerequisite: Japanese 3 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 essential Japanese grammar and formal composition. Through oral and written practice, students further expand their Japanese vocabulary and use of idiomatic expressions. Students read materials drawn from daily life and participate in daily conversations.

**Note:** The prerequisite for this course is comparable to four years of high school Japanese.

Japanese 21ab

**Beginning Conversational Japanese**

2 units; 2 hours lecture
Prerequisite: Japanese 1 with a minimum grade of C or equivalent
Credit, degree applicable
Transfer CSU, UC

This course develops fluency in oral expression, increases oral comprehension, and improves pronunciation.

Japanese 22ab

**Intermediate Conversational Japanese**

2 units; 2 hours lecture
Prerequisite: Japanese 2 and Japanese 21ab 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 the ethic areas involved with the Japanese language.

Japanese 25

**Cultural Aspects of the Japanese Language**

3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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.
Japanese 50
Special Topics in Japanese
Units determined by individual course; lecture/lab hours determined by individual course
Credit status determined by individual course
This course is designed to explore topics in Japanese more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

Japanese 99abc
Independent Study
1-3 units; hours to be arranged
Enrollment Limitation: two courses in Japanese with minimum grade of B in each and acknowledgment by the instructor with whom the student will work
Credit, degree applicable
Transfer CSU, UC - limitations apply
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 (60 hours per unit).
Note: Refer to page 11 of this Catalog for eligibility requirements.

Journalism
Journalism 1
News Writing and Reporting
3 units; 3 hours lecture
Prerequisite: credit in English A and English 84 or qualification by testing (English Placement Test) and assessment
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.

Journalism 2
Public Relations Methods
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 1A
Credit, degree applicable
Transfer CSU
This course provides an introduction in the practice of public relations, including writing news releases and broadcast announcements, creating newsletters, and developing public relations campaigns. Emphasis is placed on the journalistic style of writing and an analysis of public relations case studies.

Journalism 3ab
Advanced Reporting and News Editing
3 units; 3 hours lecture
Prerequisite: Journalism 1 with a minimum grade of C or equivalent
Credit, degree applicable
Transfer CSU
This course will provide students with instruction in interpretive, in-depth 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 electronic journalism as well as in computer typesetting and graphics.

*Some UC transferable courses have credit limitations.
For details, see a counselor, the Transfer Center advisor, or the articulation officer.
This course provides an introduction to writing feature articles for publication. The student will learn the basics of constructing a feature story in journalistic style, including interview techniques, story structure and Associated Press style, as well as professional libel and ethics guidelines. The student will survey and evaluate market trends in popular, trade, specialized, and other types of magazines, and then submit articles to those markets.

Journalism 5
Broadcast News Writing
3 units; 3 hours lecture
Recommended Preparation: Journalism 1 or English 1A
Credit, degree applicable
Transfer CSU

This course provides instruction in news writing and reporting for radio and television outlets. Principles and techniques of broadcast news, including interviewing, writing, and presenting materials for radio and television stations, are covered. Emphasis is placed on methods of gathering information, preparing broadcast news scripts, and discussing the ethics and laws that govern broadcasters.

Journalism 6
Basic Photojournalism
2 units; 1 hour lecture, 3 hours lab
Recommended Preparation: eligibility for English 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.

Journalism 7ab
Advanced Photojournalism
2 units; 1 hour lecture, 3 hours lab
Prerequisite: Journalism 6 or Photography 10 with a minimum grade of C 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.

Note: This course may be taken two semesters for either Journalism
Note: This course may be taken two semesters for either Journalism or Photography credit.
Note: Journalism 7ab is the same as Photography 11ab.

Journalism 9abcd
Magazine Editing and Production
2 units; 1 hour lecture, 3 hours lab per week to be arranged
Prerequisite: Journalism 1 with a minimum grade of C or equivalent
Credit, degree applicable
Transfer CSU

This course is designed to provide advanced journalism students with experience in writing, editing and graphic design for small publications, including production of Warrior Life, a general interest campus magazine.

Journalism 11abcd
Newspaper Publication
3 units; 2 hours lecture, 3 hours lab
Prerequisite: Journalism 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.

Journalism 12
Mass Media and Society
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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 World Wide Web. 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 minimum UC credit allowed for students completing Journalism 12 and Communication Studies 5 is one course.

Journalism 14abcd
Multimedia Journalism
3 units; 2 hours lecture, 3 hours lab
Prerequisite: Journalism 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 the World Wide Web using text, audio, video and photographs. Students create multimedia news projects for publications on the Web, using digital cameras, digital recorders, digital camcorders and computer software.

Journalism 50
Special Topics in Journalism
Units determined by individual course; lecture/lab hours determined by individual course
Credit status determined by individual course

This course is designed to explore topics in Journalism more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

The hours per week of courses may be adjusted based on the length of the term.
Journalism 96abcd
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 - limitations apply
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: The total units earned for CWEE may not exceed 16 units.

Journalism 99abc
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 - limitations apply
This course provides special advanced studies in journalism not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Journalism projects.

Note: Refer to page 11 of this Catalog for eligibility requirements.

Law
See Paralegal Studies for major and certificate programs.

Law 4
Legal Environment of Business
4 units; 4 hours lecture
Recommended Preparation: English 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
Contracts, Sales and Commercial Paper
3 units; 3 hours lecture
Recommended Preparation: eligibility for English A
Credit, degree applicable
Transfer CSU*
This course examines court systems, statutory laws, legal and equitable remedies, contract agreements as foundations for other commercial laws, law of sales and purchases of goods, commercial paper including promissory notes, drafts, checks and certificates of deposits.

*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 6
Agency, Corporations and Partnerships
3 units; 3 hours lecture
Prerequisite: Law 5 with a minimum grade of C
Credit, degree applicable
Transfer CSU
This course explores business organizations and employer/employee relationships and liabilities; agency, corporations, partnerships, Limited Liability Company (LLC), and Limited Liability Partnerships (LLP). Business torts and government regulations of business are covered.

Law 11
Introduction to Legal Research
3 units; 3 hours lecture
Prerequisite: eligibility for English 1A
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 class 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.

Laboratory Technician (Medical) – A.S. Degree
[Natural Sciences Division]

This degree is designed for students planning to transfer and pursue a California clinical laboratory technologist’s license. Upon successful completion of the program requirements, the student will have the ability to apply the fundamental principles of atomic and molecular structure, perform qualitative analysis of common metallic and non-metallic ions, utilize applied physics and particle physics, solve problems related to the differentiation and integration of single variable functions, and will acquire a foundation in the physiological and functional aspects of the human body systems. Students will become familiar with the techniques and procedures related to microscopy for determining cell morphology and tissue types. Competencies will be assessed through regularly scheduled theory and laboratory examinations.

El Camino College Major Requirements
Biology 101 and 102 or Biology 102 and Physiology 31; Chemistry 1A and 1B; Mathematics 160 or 190; Microbiology 33; Physics 2A and 2B or Physics 3A and 3B
Total Units: 36-40

Preparation for the 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.
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 the legally recognized relationships of men and women. 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, and 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 guardianships are discussed.

Law 14
**Tort Law**
3 units; 3 hours lecture
Prerequisite: Law 11 with a minimum grade of C
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
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 manner so that the evidence will be readily available for use by the attorney in preparation for and use in trial.

Note: This course is offered fall semesters only.

Law 16
**Civil Procedure**
3 units; 3 hours lecture
Prerequisite: Law 11 with a minimum grade of C or concurrent enrollment
Credit, degree applicable
Transfer CSU

This course examines civil court procedures before trial 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

The focus of this course is on the techniques of effective legal writing.

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
**Law and Computers**
2 units; 1 hour 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 50
**Special Topics in Law**
Units determined by individual course; lecture/lab hours determined by individual course
Credit status determined by individual course

This course is designed to explore topics in Law more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

Law 95abcd
**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 or current enrollment in one course from the major.
Credit, degree applicable
Transfer CSU - limitations apply

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: The total units earned for CWEE may not exceed 16 units.

**Legal Assistant**
See Paralegal Studies

The hours per week of courses may be adjusted based on the length of the term.
Library Information Science

Library Information Science 1
Introduction to Library Information Science
1 unit; 1 hour lecture
Credit, degree applicable
Transfer CSU, UC
This course 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 the 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.

Library Information Science 10
Library Research Using the Internet
1 unit; 1 hour lecture
Credit, degree applicable
Transfer CSU, UC
This course 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 P/NP option.

Library Science

El Camino College does not offer a curriculum in library training. The student who plans to enter a library school should follow the lower division requirements of the college or university to which he or she plans to transfer and acquire a background in social sciences and the language arts. For specific requirements, make an appointment to see the Humanities counselor.

Liberal Studies (Elementary Teaching) – A.A. Degree
(Behavioral and Social Sciences Division)

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.

El Camino College Major Requirements

Transfer Degree Option: Students must complete the requirements listed on the guide sheet for a transfer institution.

Teacher Preparation Option: English 1A, Communication Studies 1 or English 1C; History 101, or 102B; Political Science 1; Geography 5 or Child Development 103 or History 140; one course from: Biology 10, Geology 6, Physical Science 25; one course from: Art 1, Dance 1, English 15A, 15B, 35, 36, 40A, 40B, 42, 43, 44, Music 11, 12, Theatre 1; one course from: Mathematics 73, 80, 110, 111, 115, 120, 130, 150, 170
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.

Machine Tool Technology

Machine Tool Technology 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.

Machine Tool Technology 10B
Computer Numerical Control Programming
3 units; 3 hours lecture, 1 hour lab
Prerequisite: Machine Tool Technology 10A or equivalent;
Machine Tool Technology 40 or equivalent; and Machine Tool Technology 46 or 101abcd 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.
Machine Tool Technology – A.S. Degree and Certificates of Achievement

[Industry and Technology Division]

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.

El Camino College Major Requirements

Complete the courses in one of the following options: Machinist or Numerical Control Programmer. At least 50% of the courses required for the major must be completed at El Camino College.

**Machinist Option**: Machine Tool Technology 2, 10A, 16ab*, 40, 101abcd*, 103abcd*, 105abcd*, 107abcd* (*one semester)
Total Units: 28

**Numerical Control Programmer Option**: Machine Tool Technology 2, 10A, 10B, 10J, 16ab*, 40, 101abcd*, 103abcd*, 105abcd*; one course from: Machine Tool Technology 10K, 11abcd* (*one semester)
Total Units: 33

Recommended Electives: Computer Aided Design/Drafting 5, 10abcd, 31abcd, 45, Machine Tool Technology 95abcd, 99abc, Technical Mathematics 1, Welding 15ab

Certificates of Achievement

A Certificate of Achievement will be granted to students completing the courses in the Machinist or Numerical Control Programmer options. At least 50% of the courses required for the Certificate of Achievement must be completed at El Camino College.

**Machinist**: Machine Tool Technology 2, 10A, 16ab*, 40, 101abcd*, 103abcd*, 105abcd*, 107abcd* (*one semester)
Total Units: 28

**Numerical Control Programmer**: Machine Tool Technology 2, 10A, 10B, 10J, 16ab*, 40, 101abcd*, 103abcd*, 105abcd*; one course from: Machine Tool Technology 10K, 11abcd* (*one semester)
Total Units: 33

*Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center advisor, or the articulation officer.
Machine Tool Technology 11abcd
(formerly 10G)
Numerical Control Graphics Programming with CATIA
3 units; 2 hours lecture, 3 hours lab
Prerequisite: Computer Aided Design/Drafting 31abcd with a minimum grade of C
Recommended Preparation: Computer Aided Design/Drafting 31abcd and Machine Tool Technology 10abcd
Credit, degree applicable
Transfer CSU
This is a course in computer aided numerical control programming emphasizing interactive computer graphics with CATIA *(registered trade mark of Dassault Systems). Concepts explored include interactive geometry and surface construction, tool motion created using Prismatic Machining and Multi-Axis Surface Milling functions, graphic editing, graphic output, repetitive programming, and complex surface machining for three, four, and five axis machining centers.

Machine Tool Technology 16ab
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 P/NP option.

Machine Tool Technology 40
Machine Shop Calculations
3 units; 3 hours lecture
Recommended Preparation: Technical Mathematics 1 or equivalent
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.

Machine Tool Technology 46
Basic Machine Tool Operation
3 units; 2 hours lecture, 4 hours lab
Credit, degree applicable
Transfer CSU
In this course students are introduced to the basic principles and operation of machine tools with emphasis on bench operations, drilling, engine lathe, milling, and grinding machines. Standard industry practices and tool set ups are emphasized. Laboratory projects and exercises related to the lectures and demonstrations will be assigned.

Machine Tool Technology 47abcd
NIMS Level I Credential Preparation
0.5 - 2 units; 1.5 - 6 hours lab per week to be arranged
Prerequisite: Machine Tool Technology 13A with a minimum grade of C
Credit, not degree applicable
In this course students develop their machining skills in preparation for the seven categories of NIMS [National Institute for Metalworking Skills] Level I credential examinations. Skill development activities will focus on safe machining practices, blueprint reading, machine tool calculations, workpiece inspection, set up, and operation of conventional machine tools.
Note: Pass/no pass only.

Machine Tool Technology 48abcd
NIMS Level II Credential Preparation
0.5 - 2 units; 1.5 - 6 hours lab per week to be arranged
Prerequisite: Machine Tool Technology 13A with a minimum grade of C
Credit, not degree applicable
In this course students develop their machining skills in preparation for the six categories of NIMS [National Institute for Metalworking Skills] Level II credential examinations. Skill development activities will focus on safe machining practices, blueprint reading, machine tool calculations, workpiece inspection, set up, and operation of conventional and CNC [Computer Numerically Controlled] machine tools.
Note: Pass/no pass only.

Machine Tool Technology 50
Special Topics in Machine Tool Technology
Units determined by individual course; lecture/lab hours determined by individual course
Credit status determined by individual course
This course is designed to explore topics in Machine Tool Technology more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

Machine Tool Technology 95abcd
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 - limitations apply
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: The total units earned for CWEE may not exceed 16 units.

Machine Tool Technology 99abc
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 acknowledgement of the instructor with whom the student will work
Credit, degree applicable
Transfer CSU - limitations apply
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 [60 hours per unit].
Note: Refer to page 11 of this Catalog for eligibility requirements.

Machine Tool Technology 101abcd
Introduction to Conventional and CNC Machining
4 units; 2 hours lecture, 6 hours lab
Credit, degree applicable
Transfer CSU
This introductory course covers the principles and operation of conventional and CNC [Computer Numerically Controlled] 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 P/NP option.
### Machine Tool Technology 103abcd
#### Conventional and CNC Turning
4 units; 2 hours lecture, 6 hours lab  
Prerequisite: Machine Tool Technology 46 or 101abcd (or the former Machine Tool Technology 13A) with a minimum grade of C in prerequisite or equivalent  
Credit, degree applicable  
Transfer CSU  
This course covers at an advanced level the principles and operation of conventional and CNC (Computer Numerically Controlled) 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 P/NP option.

### Machine Tool Technology 105abcd
#### Conventional and CNC Milling
4 units; 2 hours lecture, 6 hours lab  
Prerequisite: Machine Tool Technology 46 or 101abcd (or the former Machine Tool Technology 13A) with a minimum grade of C in prerequisite or equivalent  
Credit, degree applicable  
Transfer CSU  
This course covers at an advanced level the principles and operation of conventional and CNC (Computer Numerically Controlled) machine tools with an emphasis on the set up and operation of lathes. Topics will include safety, drilling, milling, tapping, tooling, CNC programming practices, and setups as applied in industry.  
*Note: Letter grade or P/NP option.

### Machine Tool Technology 107abcd
#### Advanced Manufacturing Processes
4 units; 2 hours lecture, 6 hours lab  
Prerequisite: Machine Tool Technology 46 or 101abcd (or the former Machine Tool Technology 13A) with a minimum grade of C in prerequisite or equivalent  
Credit, degree applicable  
Transfer CSU  
This course covers the principles and operation of machine tools with an emphasis on advanced manufacturing processes and machines, such as EDM (Electrical Discharge Machines), water abrasive jet machines, and grinding machines. Additional topics will include abrasives, coordinate measuring machines, advanced precision measurement, GD&T (Geometric Dimensioning and Tolerancing), optical comparators, and practices and setups as applied in industry.  
*Note: Letter grade or P/NP option.

### Manufacturing Technology – A.S. Degree and Certificate of Achievement
(Industry and Technology Division)

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.

#### El Camino College Major Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
<th>Lecture</th>
<th>Laboratory</th>
<th>Prerequisites</th>
<th>Transferable Courses</th>
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<tbody>
<tr>
<td>Machine Tool Technology 101abcd*</td>
<td>Machine Tool Technology 10A or Computer Aided Design/Drafting 10abcd*</td>
<td>4</td>
<td>2</td>
<td>6</td>
<td>Machine Tool Technology 10A or Computer Aided Design/Drafting 10abcd*; Machine Tool Technology 2 or Computer Aided Design/Drafting 2; Technical Mathematics 1 or Machine Tool Technology 40; Electronics and Computer Hardware Technology 11; Welding 15ab*; a minimum of 18 units from: Computer Aided Design/Drafting 28abcd*, 31abcd*, 32abcd*, 33abcd*, 37abcd*, 45, 47, 49; Electronics and Computer Hardware Technology 22, 110, 120, 122, 124, 130, 140ab*, 142ab*, 144ab*, 191, 192; Engineering Technology 10 or 10A and 10B, 12 or 12A and 12B, 14 or 14A and 14B, 16 or 16A and 16B, 18 or 18A and 18B; Machine Tool Technology 10B, 10J, 11abcd, 103abcd*, 105abcd*, 107abcd*, Manufacturing Technology 2, 70, 75 or 75A and 75B; Welding 1, 2abc, 21abc, 40abcd, 45ab; Cooperative Work Experience Education courses: a maximum of 4 units from either Computer Aided Design/Drafting 95abcd, Electronics and Computer Hardware Technology 95abcd, Machine Tool Technology 95abcd, Welding 95abcd (*one semester)</td>
<td>Total Units: 37</td>
</tr>
</tbody>
</table>
| Certificate of Achievement | A Certificate of Achievement will be granted upon completion of the courses listed below. At least 50% of the courses required for the Certificate of Achievement must be completed at El Camino College.  
Machine Tool Technology 101abcd*; Machine Tool Technology 10A or Computer Aided Design/Drafting 10abcd*; Machine Tool Technology 2 or Computer Aided Design/Drafting 2; Technical Mathematics 1 or Machine Tool Technology 40; Electronics and Computer Hardware Technology 11; Welding 15ab*; a minimum of 18 units from: Computer Aided Design/Drafting 28abcd*, 31abcd*, 32abcd*, 33abcd*, 37abcd*, 45, 47, 49; Electronics and Computer Hardware Technology 22, 110, 120, 122, 124, 130, 140ab*, 142ab*, 144ab*, 191, 192; Engineering Technology 10 or 10A and 10B, 12 or 12A and 12B, 14 or 14A and 14B, 16 or 16A and 16B, 18 or 18A and 18B; Machine Tool Technology 10B, 10J, 11abcd, 103abcd*, 105abcd*, 107abcd*, Manufacturing Technology 2, 70, 75 or 75A and 75B; Welding 1, 2abc, 21abc, 40abcd, 45ab; Cooperative Work Experience Education courses: a maximum of 4 units from either Computer Aided Design/Drafting 95abcd, Electronics and Computer Hardware Technology 95abcd, Machine Tool Technology 95abcd, Welding 95abcd (*one semester) | Total Units: 37 |

*Some UC transferable courses have credit limitations.  
For details, see a counselor, the Transfer Center advisor, or the articulation officer.
Manufacturing Technology

Manufacturing Technology 2
Materials and Processes of Manufacturing
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 84
Credit, degree applicable
Transfer CSU
This course introduces students to materials used in manufacturing, their properties, characteristics, classification, and treatment. The manufacturing processes of material removal, fabrication, joining, surface preparation, casting, molding, forging, and extruding are also covered. The course will assist the student in preparing for certification as a Certified Manufacturing Technologist (CMT) sponsored by the Society of Manufacturing Engineers (SME).

Manufacturing Technology 50
Special Topics in Manufacturing Technology
Units determined by individual course; lecture/lab hours determined by individual course
Credit status determined by individual course
This course is designed to explore topics in Manufacturing Technology more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

Manufacturing Technology 70
Basic Robotics
2 units; 1 hour lecture, 3 hours lab
Credit, degree applicable
Transfer CSU
In this course, students will explore the technologies used to fabricate model robotic systems. Additional topics covered include basic electronics theory, electro-mechanical fabrication, micro-controller operation, machining processes, metal fabrication, and careers in technology. Project building and problem solving will be stressed.

Manufacturing Technology 75
Integrated Robotic and Automated Technologies
3 units; 2 hours lecture, 4 hours lab
Recommended Preparation: Electronics and Computer Hardware Technology 11, Manufacturing Technology 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.

Manufacturing Technology 75A
Integrated Robotic and Automated Technologies I
1.5 units; 1 hour lecture, 2 hours lab
Recommended Preparation: Electronics and Computer Hardware Technology 11, Manufacturing Technology 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, electro-mechanical fabrication, motors, and drive trains. Students will construct, program, and test a vehicular or process robot.

Manufacturing Technology 75B
Integrated Robotic and Automated Technologies II
1.5 units; 1 hour lecture, 2 hours lab
Recommended Preparation: Electronics and Computer Hardware Technology 11, Manufacturing Technology 70, 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, micro-controller programming, sensors, manufacturing materials and processes. Students will construct, program, and test a vehicular or process robot to satisfy instructor assigned goals or tasks.

*Some UC transferable courses have credit limitations.
For details, see a counselor, the Transfer Center advisor, or the articulation officer.

Manufacturing Technology 99abc
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 - limitations apply
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 [60 hours per unit].
Note: Refer to page 11 of this Catalog for eligibility requirements.

Mathematics

See Business

Mathematics

Course prerequisites must be satisfied at El Camino College or another accredited college. A transcript or grade slip is required for verification of a grade from another college. The El Camino College Mathematics Placement Test may be taken only for initial mathematics course placement. Skipping a course by re-taking the Mathematics Placement Test is not permitted.

Mathematics 10A
Basic Arithmetic Skills, Part I
2 units; 2 hours lecture
Credit, not degree applicable
This introductory arithmetic course is designed to develop number and operation sense using whole numbers and fractions. Topics include writing whole numbers in various forms, estimation, divisibility tests, and applications.

Note: Students enrolled in this course are required to participate in individual and group activities.
Mathematics 10B
Basic Arithmetic Skills, Part II
2 units; 2 hours lecture
Prerequisite: Mathematics 10A with a minimum grade of C
Credit, not degree applicable
This course is a continuation of arithmetic and is designed to develop number and operation sense using decimals and percents and to develop problem-solving skills using proportions. Topics include writing decimals in various forms, estimation, ratios, and applications.
Note: Students enrolled in this course are required to participate in individual and group activities.

Mathematics 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.
Note: Mathematics 12 is the same as Mathematics 10A and 10B.

Mathematics 23
Pre-Algebra
3 units; 4 hours lecture
Prerequisite: Mathematics 10B or 12 with a minimum grade of C in prerequisite or qualification by testing (El Camino College Mathematics Placement Test) and 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.

Mathematics – A.S. Degree
[Mathematical Sciences Division]
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. A minimum of one additional course is required 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.

El Camino College Major Requirements
At least 8 units for this degree must be completed at El Camino College.
Mathematics 190, 191, 220; four units from: Mathematics 140, 150, 210, 270; Physics 1A; Computer Science 1
Total Units: 19-20

Mathematics 25
Pre-Algebra Review
2 units; 2 hours lecture
Prerequisite: Mathematics 10B or 12 with a minimum grade of C in prerequisite or qualification by testing (El Camino College Mathematics Placement Test) and assessment
Credit, not degree applicable
This course is a review of pre-algebra and meets the needs of students who have previous pre-algebra experience. Topics include the arithmetic operations of addition, subtraction, multiplication, division and exponentiation on the sets of natural numbers, integers, and rational numbers. Knowledge of these operations is extended to evaluate and simplify algebraic expressions as well as to solve linear equations, and application problems.

Mathematics 33
(formerly Mathematics 41A)
Extended Elementary Algebra, Part I
3 units; 4 hours lecture
Prerequisite: Mathematics 23 or Mathematics 25 with a minimum grade of C in prerequisite or qualification by testing (El Camino College Mathematics Placement Test) and assessment
Credit, not degree applicable
This is the first course in the two-course Extended Elementary Algebra sequence, which begins at a slower pace than elementary algebra. Students examine the connections between the order of operation on real numbers and the elementary algebraic ideas of variables, expressions, and equations. Students explore the four fundamental representations of relations between two variables: verbal, algebraic, graphical, and numerical. Linear relations serve as the primary example, but students also study quadratic relations. Students are expected to master basic numeric and algebraic manipulation skills, including combining like terms, expanding products, and elementary factoring.

Note: The hours per week of courses may be adjusted based on the length of the term.
El Camino College
Pre-Transfer Mathematics

Arithmetic
Math 12
3 unit, 4 hr lec
OR
Math 10A
2 unit
Math 10B
2 unit

Pre-Algebra
Math 23
3 unit, 4 hr lec
OR
Math 25
2 unit

A student finishing Math 23 with an A or a B should consider enrolling in Math 40.
A student finishing Math 23 with a C should consider enrolling in Math 33.

Elementary Algebra
Math 40
4 unit, 4 hr lec

Extended Elementary Algebra
Parts I and II
Math 33
3 unit, 4 hr lec
Math 43
3 unit, 4 hr lec

Math 73
Intermediate Algebra for GE*
5 unit, 5 hr lec
OR
Math 80
Intermediate Algebra for STEM**
5 unit, 5 hr lec

Math 60
Geometry
4 unit, 4 hr lec

Intermediate Algebra
Associate Degree Mathematics Competency Courses

Mathematics for Teachers
Advanced Mathematics Courses

* General Education
** Science, Technology, Engineering and Mathematics

Transfer-Level Mathematics
General Education Courses
Mathematics for Teachers

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Mathematics 40
**Elementary Algebra**
4 units; 4 hours lecture
*Prerequisite: Mathematics 23 or Mathematics 25 with a minimum grade of C in prerequisite or qualification by testing (El Camino College Mathematics Placement Test) and 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.*

Mathematics 43
(formerly Mathematics 41B)
**Extended Elementary Algebra, Part II**
3 units; 4 hours lecture
*Prerequisite: Mathematics 33 with a minimum grade of C or equivalent*
*Credit, degree applicable*
This is the second course in the two-course Extended Elementary Algebra sequence. Students in this course explore the concept of relation and its four fundamental representations: verbal, algebraic, graphical, and numerical. Students show mastery of more advanced algebraic manipulation skills, including extracting roots and more advanced factoring. Students examine systems of linear equations, as well as quadratic, reciprocal and square root relations.

Mathematics 50
**Special Topics in Mathematics**
Units determined by individual course; lecture/lab hours determined by individual course
*Credit status determined by individual course*
This course is designed to explore topics in Mathematics more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

Mathematics 60
**Elementary Geometry**
4 units; 4 hours lecture
*Prerequisite: Mathematics 40 or Mathematics 43 with a minimum grade of C in prerequisite 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.*

Mathematics 73
**Intermediate Algebra for General Education**
5 units; 5 hours lecture
*Prerequisite: Mathematics 40 or 43 with a minimum grade of C in prerequisite or qualification by testing (El Camino College Mathematics Placement Test) and assessment*
*Credit, degree applicable*
This intermediate algebra course is designed for students who are not considering advanced 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 all transfer-level mathematics course sequences, including the calculus sequence.*

Mathematics 99abc
**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 acknowledgement by the instructor with whom the student will work.*
*Credit, degree applicable*
*Transfer CSU, UC - limitations apply*
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 [60 hours per unit].
*Note: Refer to page 11 of this Catalog for eligibility requirements.*

The hours per week of courses may be adjusted based on the length of the term.

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*Some UC transferable courses have credit limitations.*

For details, see a counselor, the Transfer Center advisor, or the articulation officer.
Mathematics 100  
Supervised Tutoring: Mathematics  
0 units; maximum 72 hours per semester  
Corequisite: enrollment in an El Camino College Mathematics Department course  
Enrollment Limitation: Referral by instructor or counselor based on assessed academic need  
Non-Credit  
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.

Mathematics 110  
Structures and Concepts in Mathematics  
3 units; 3 hours lecture  
Prerequisite: Mathematics 73 or Mathematics 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*  
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, number theory, functions, graphs, patterns and the structure of real numbers. Students investigate the interrelationships among these topics, with a 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 Mathematics 110, 111, 115, and 116 is one course.

Mathematics 111  
Mathematics for Elementary School Teachers - Geometry, Probability and Statistics  
3 units; 3 hours lecture  
Prerequisite: Mathematics 60 with a minimum grade of C or equivalent; and Mathematics 73 or Mathematics 80 with a minimum grade of C in prerequisite or equivalent  
Credit, degree applicable  
Transfer CSU, UC*  
This course, designed for preservice elementary school teachers, will examine four content areas: Geometry (plane, solid, and coordinate geometry, congruence, similarity and tessellations); Measurement and Estimation (length, area, and volume); Statistics (graphs, measures of central tendency); and Probability (single and multistaged events, odds and expected values, and normal distributions).  
*Note: The maximum UC credit allowed for students completing Mathematics 110, 111, 115, and 116 is one course.

Mathematics 115  
Probability and Statistics for Prospective Elementary School Teachers  
4 units; 4 hours lecture  
Prerequisite: Mathematics 73 or Mathematics 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 English 1A  
Credit, degree applicable  
Transfer CSU, UC*  
In this course, designed for prospective elementary school teachers, student focus on the conceptual and procedural understanding of probability and statistics. During the statistics portion of the course, students investigate the creation and interpretation of graphs, random variables and sampling, measures of central tendency and dispersion, analysis of experiments including hypothesis testing, design of experiments, and data gathering. During the probability portion of the course, students explore the basic laws of probability, including dependent, independent, and mutually exclusive events, odds, and expected outcomes. Group activities and hands-on activities, as well as the use of graphing calculators and statistical software, are integrated throughout the course.  
*Note: The maximum UC credit allowed for students completing Mathematics 110, 111, 115, and 116 is one course.

Mathematics 116  
Geometry and Measurement for Prospective Elementary School Teachers  
4 units; 4 hours lecture  
Prerequisite: Mathematics 60 and Mathematics 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 Mathematics 110, 111, 115, and 116 is one course.

Mathematics 120  
Nature of Mathematics  
3 units; 3 hours lecture  
Prerequisite: Mathematics 73 or Mathematics 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 surveys general ideas and concepts of mathematics, including mathematics of finance, set theory, probability, statistics, voting systems, logic, and types of geometries.  
Note: This course meets the CSU general education requirement for mathematics and quantitative reasoning.

Mathematics 130  
College Algebra  
3 units; 3 hours lecture  
Prerequisite: Mathematics 73 or Mathematics 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*  
In this course, students will explore polynomial, radical, rational, exponential, and logarithmic functions and their graphs, as well as sequences, series, combinatorics, and the Binomial Theorem.  
*Note: The maximum UC credit allowed for students completing Mathematics 130 and Mathematics 180 is one course.

*Some UC transferable courses have credit limitations.  
For details, see a counselor, the Transfer Center advisor, or the articulation officer.
Mathematics 140  
*Finite Mathematics for Business and Social Sciences*  
4 units; 4 hours lecture  
Prerequisite: Mathematics 73 or Mathematics 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.

Mathematics 150  
*Elementary Statistics with Probability*  
4 units; 4 hours lecture  
Prerequisite: Mathematics 73 or Mathematics 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 Psychology 9A or Mathematics 150 and Sociology 109 is one course.*

Mathematics 160  
*Calculus I for the Biological, Management and Social Sciences*  
4 units; 4 hours lecture  
Prerequisite: Mathematics 130 or Mathematics 180 with a minimum grade of C in prerequisite or qualification by testing [El Camino College Mathematics Placement Test] and assessment  
Recommended Preparation: Mathematics 130 with a minimum grade of C  
Credit, degree applicable  
Transfer CSU, UC*  
This course includes the study of differentiation and integration of algebraic and exponential functions of one variable, definite integrals and applications. These topics are applied to practical problems in relevant disciplines, such as life sciences, economics or sociology.  
*Note: The maximum UC credit allowed for students completing Mathematics 160 and 161 and Mathematics 190 and 191 is one series.*

Mathematics 161  
*Calculus II for the Biological, Management and Social Sciences*  
3 units; 3 hours lecture  
Prerequisite: Mathematics 160 with a minimum grade of C  
Credit, degree applicable  
Transfer CSU, UC*  
This course includes techniques of single-variable integration; both differential and integral multi-variable calculus, differential equations; and infinite sequences and series. These topics are applied to practical problems in relevant disciplines, such as life sciences, economics or sociology.  
*Note: The maximum UC credit allowed for students completing Mathematics 160 and 161 and Mathematics 190 and 191 is one series.*

Mathematics 170  
*Trigonometry*  
3 units; 3 hours lecture  
Prerequisite: Mathematics 60 and Mathematics 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 includes a study of trigonometric functions, their inverses, trigonometric identities, equations, complex numbers, graphs of trigonometric functions, and applications.  
*Note: One year of high school geometry is equivalent to Mathematics 60.*

Mathematics 180  
*Pre-Calculus*  
5 units; 5 hours lecture  
Prerequisite: Mathematics 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 Mathematics 190 is one course.*

Mathematics 190  
*Single Variable Calculus and Analytical Geometry I*  
5 units; 5 hours lecture  
Prerequisite: Mathematics 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*  
Topics in this course include: limits, derivatives of algebraic, trigonometric and transcendental functions; differentials; graphing; applications; definite and indefinite integrals. Problem solving using a computer algebra system is integrated throughout the course.  
*Note: The maximum UC credit allowed for students completing Mathematics 160 and 161 and Mathematics 190 and 191 is one series.*

Mathematics 191  
*Single Variable Calculus and Analytical Geometry II*  
5 units; 5 hours lecture  
Prerequisite: Mathematics 190 with a minimum grade of C  
Credit, degree applicable  
Transfer CSU, UC*  
This course includes methods of integration; applications of integration; improper integrals; numerical integration; infinite sequences, series and power series; parametric equations, polar coordinates; as well as conic sections.  
*Note: The maximum UC credit allowed for students completing Mathematics 160 and 161 and Mathematics 190 and 191 is one series.*
Mathematics 210
Introduction to Discrete Structures
4 units; 4 hours lecture
Prerequisite: Mathematics 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, graphs and trees.

Mathematics 220
Multi-Variable Calculus
5 units; 5 hours lecture
Prerequisite: Mathematics 191 with a minimum grade of C
Credit, degree applicable
Transfer CSU, UC
This course contains topics in differential calculus in several variables, including partial differentiation; tangent planes to surfaces; directional derivatives; and optimization problems. Topics in integral calculus in several variables include line, surface, and volume integrals, as well as the theorems of Green, Gauss (Divergence) and Stokes as generalizations of the Fundamental Theorem Calculus. Other topics include vector algebra and solid analytic geometry.

Mathematics 270
Differential Equations with Linear Algebra
5 units; 5 hours lecture
Prerequisite: Mathematics 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, systems of linear differential equations and applications.

Medical Terminology

Medical Terminology 1
(formerly Medical Assistant 4)
Medical Terminology
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 1A
Credit, degree applicable
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.

Music

Music 1
Music Fundamentals
3 units; 3 hours lecture
Credit, degree applicable
Transfer CSU, UC
In this course students will analyze and identify the fundamentals of music theory. 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, and non-harmonic tones. Included are terms and symbols for tempo, dynamics, and repeats.

Music 2A
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.

Music 2B
Advanced Sightsinging
2 units; 2 hours lecture
Prerequisite: Music 1 or 2A or 31A 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.

Music 3
Introduction to Music Theory
3 units; 3 hours lecture
Enrollment Limitation: ability to read music notation (treble or bass clef and rhythm/meter)
Credit, degree applicable
Transfer CSU, UC
This course is designed for students who read music but have little or no background in music theory. Emphasis is placed on music notation, the piano keyboard, rhythm and meter, major and minor scales and key signatures, intervals, chords, musicianship, and corresponding aural skills.

*Some UC transferable courses have credit limitations.
For details, see a counselor, the Transfer Center advisor, or the articulation officer.
Music – A.A. Degree

(Fine Arts Division)

By completing the degree or certificate requirements, students gain theoretical and practical knowledge of the music and/or entertainment industries. The degree provides students with a comprehensive foundation in music theory, history, and performance. This is achieved through a structured training program which includes solos, ensembles, musicianship, basic vocal, keyboard, and technological skills. Completing the certificate requirements prepares students for entry-level positions in music merchandising, audio for film/video production, computer music synthesis, songwriting, and recording engineering. Students will demonstrate proficiency throughout the program by analyzing, writing, interpreting, and performing pieces of music, or through demonstrating skills in music technology. Program assessment is measured by juried and public performances, program completion, transferability, and periodic program review.

El Camino College Major Requirements
8 units from Music Theory: Music 3A, 3B, 3C
6 units from History: Music 15A, 15B
4 units from Keyboard: Music 31A, 31B, 31C, 31D, 32abcd
2 units from Voice: Music 18ab, 19abcd, 40abcd, 41abcd
4 units from Music 23abcd
Performance - minimum of six units: Music 52abcd, 53abcd, 55abcd, 57abcd, 64abcd, 65abcd, 67abcd, 68abcd, 69abcd, 70abcd, 71abcd, 72abcd
Recommended Electives: Music 2A, 2B, 5, 8A, 8B, 15A, 15B, 22abcd, 22abcd, 30ab, 60abcd, 61abcd, 62abcd, 63abcd, 76abcd, 79abcd, 80, 81A, 81B, 90abcd, 131ab
Total Units: 30

Preparations for the 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.

Music 3A
Theory and Musicianship I
4 units; 5 hours lecture
Prerequisite: Music 1 with a minimum grade of C or equivalent
Recommended Preparation: Music 2A; Music 31A or equivalent; eligibility for English 1A or ESL 52C
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.

Music 3B
Theory and Musicianship II
4 units; 5 hours lecture
Prerequisite: Music 3A with a minimum grade of C or equivalent
Recommended Preparation: Music 2A or 2B; Music 31B or equivalent
Credit, degree applicable
Transfer CSU, UC
This course is a continuation of Music 3A 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.

Music 3C
Theory and Musicianship III
4 units; 5 hours lecture
Prerequisite: Music 3B with a minimum grade of C or equivalent
Recommended Preparation: Music 15A or 15B
Credit, degree applicable
Transfer CSU, UC
This course is a continuation of Music 3B 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 sight-singing and dictation will accompany written work.

Music 5
Commercial/Jazz Theory and Musicianship
3 units; 3 hours lecture
Prerequisite: Music 1 with a minimum grade of C or equivalent
Recommended Preparation: Music 3A 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.

Music 7
Exploring Music in Education
3 units; 3 hours lecture
Credit, degree applicable
Transfer CSU
This course is designed for students interested in elementary school education. It comprises the fundamentals of music, singing, and playing the recorder, as well as rhythm and accompanying instruments. Also included are music leading skills and an introduction to music of different cultures and styles. Students will attend selected performances.

The hours per week of courses may be adjusted based on the length of the term.

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Music 8A

Counterpoint
2 units; 2 hours lecture
Prerequisite: Music 3B with a minimum grade of C
Credit, degree applicable
Transfer CSU, UC

This course is an introduction to melody and contrapuntal procedures of the 18th century. Students will analyze binary form compositions and compose their own works in the style of J.S. Bach.

Note: This course is offered in the spring semester only.

Music 8B

Counterpoint II
2 units; 2 hours lecture
Prerequisite: Music 8A with a minimum grade of C
Credit, degree applicable
Transfer CSU, UC

This course is a continuation of Music 8A and includes the advanced study of contrapuntal procedures during the 18th century with specific emphasis given to the analysis and composition of canons, inventions, and fugues.

Note: This course is offered in the spring semester only.

Music 11

Music Appreciation Survey
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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.

Music 12

Music Cultures of the World
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 1A
Credit, degree applicable
Transfer CSU, 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.

Music 13

Survey of Jazz
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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.

Music 15A

Music History and Literature up to 1750
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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.

Music 15B

Music History and Literature – 1750 to Present
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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.

Music 16

History of Rock Music
3 units; 3 hours lecture
Recommended Preparation: Eligibility for English 1A
Transfer CSU

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 artistic trends, influential artists, and the impact of technology on rock music throughout the years.

Music 17

Music of the Beatles
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 1A
Credit, degree applicable
Transfer CSU

This course surveys musical styles of the Beatles from 1957-1970. It focuses on the historical, aesthetic, social-political, 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.

Music 18ab

Voice Class I
2 units; 2 hours lecture, 1 hour lab
Credit, degree applicable
Transfer CSU, UC

Recommended Preparation: the ability to match pitch and sing a harmonic part.

Enrollment Limitation: Audition. Students must be able to match pitch and sing a harmony part.

Prerequisite: one semester of Music 18ab 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. In each successive semester phonetic diction will be introduced, first in Italian, then Spanish, German, and French. Attendance at selected musical events at El Camino College Center for the Arts is required.

Music 19abcd

Voice Class II
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.

Music 20abcd

Music Production Workshop
1 unit; 3 hours lab
Recommended Preparation: the ability to dance and act
Enrollment Limitation: Audition. Students must be able to match pitch and sing a harmony part.
Credit, degree applicable
Transfer CSU, UC

This course offers the opportunity to participate in a musical theatre production as a member of the chorus or as a soloist.
This course is designed for the beginning classroom performances. Students must provide their own instruments. Except for keyboards and drums, students must provide their own instruments for all music 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 and drums, students must provide their own instruments for classroom performances.

Music 30ab  
Beginning Jazz Improvisation  
2 units; 1 hour lecture, 3 hours lab  
Enrollment Limitation: audition for class meeting (ability to perform music of moderate difficulty on a standard band instrument or vocally)  
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 and drums, students must provide their own instruments for classroom performances.

Music 31A  
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.

Music 31B  
Beginning Piano II  
2 units; 2 hours lecture, 1 hour lab  
Prerequisite: Music 31A with a minimum grade of C or equivalent  
Credit, degree applicable  
Transfer CSU, UC

This course is a continuation of Music 31A (Beginning Piano) using increasingly complex materials. Students will attend select musical events at the El Camino College Center for the Arts and in the community.

Music 31C  
Intermediate Piano I  
2 units; 2 hours lecture, 1 hour lab  
Prerequisite: Music 31B 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 and in the community is required.

Music 31D  
Intermediate Piano II  
2 units; 2 hours lecture, 1 hour lab  
Prerequisite: Music 31C 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 style periods, the Baroque, Classic, Romantic and Contemporary. Attendance at specified musical events at El Camino College Center for the Arts and in the community is required.

Music 32abcd  
Advanced Piano  
2 units; 2 hours lecture, 1 hour lab  
Prerequisite: Music 31D 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 and in the community is required.
Music 45abcd  
**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.

Music 46abcd  
**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.

Music 47ab  
**Beginning Guitar**  
2 units; 2 hours lecture, 1 hour lab  
Credit, degree applicable  
Transfer CSU, UC  
This course introduces techniques for playing the guitar including holding, tuning, and fingerpicking. Emphasis will be placed on learning music notation, the fundamentals of music, and the playing of simple melodies, chords, and accompaniment patterns. Students will explore a variety of styles ranging from Classical to more contemporary Rock/Pop.

Music 48abcd  
**Intermediate Guitar**  
2 units; 2 hours lecture, 1 hour lab  
Prerequisite: one semester of Music 47ab with a minimum grade of C or equivalent  
Credit, degree applicable  
Transfer CSU, UC  
This course is a continuation of Music 47ab. The course focuses on the continued development of reading and playing classical and other fingerstyle music for the guitar. Fingerboard techniques beyond the first position will be introduced. This course also includes the study of contemporary song styles, accompaniment, and improvisation, using such techniques as pentatonic scales, blues scales, Travis pick, and strumming variations.

Music 50  
**Special Topics in Music**  
Units determined by individual course; lecture/lab hours determined by individual course  
Credit status determined by individual course  
This course is designed to explore topics in Music more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

Music 51abcd  
**Mixed Chorus**  
1.5 units; 3 hours lecture  
Transfer CSU  
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.

Music 52abcd  
**Concert Choir**  
1.5 units; 3 hours lecture  
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 P/NP option.*

Music 53abcd  
**Chorale**  
2 units; 5 hours lecture  
Recommended Preparation: previous choral experience  
Enrollment Limitation: Audition during the first week of class. The student needs to have the ability to sing a harmony part  
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 P/NP option.*

Music 55abcd  
**College Community Choir**  
1.5 units; 3 hours lecture  
Credit, degree applicable  
Transfer CSU, UC  
This is a course designed for the study and performance of major choral works including those with orchestra accompaniment, light opera, and other appropriate choral materials representing various style periods. Although there are no auditions, it is highly suggested that students be able to sing on pitch. If applicable, soloists may be auditioned from the choir members. Performances are held on campus and in the community.  
*Note: Letter grade or P/NP option.*

Music 57abcd  
**Women’s Chorus**  
1.5 units; 3 hours lecture  
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 P/NP option.*

Music 58abcd  
**Beginning Chorus**  
1.5 units; 3 hours lecture  
Credit, degree applicable  
Transfer CSU, UC  
This course provides students who have limited or no choral experience the opportunity to sing in an ensemble setting. Emphasis is placed on improving the singing voice and learning to identify and interpret basic notation, intervals, and rhythmic patterns. Students will perform in concerts each semester.  
*Note: Letter grade or P/NP option.*

Music 60abcd  
**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 P/NP option.*
### Music 61abcd
**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 P/NP option.

### Music 62abcd
**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 P/NP option.

### Music 63abcd
**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 P/NP option.

### Music 64abcd
**Symphonic Band**
1.5 units; 3 hours lecture
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 P/NP option.

### Music 65abcd
**College Community Band**
1.5 units; 3 hours lecture
Enrollment Limitation: audition at the first class meeting (ability to perform music of moderate difficulty on standard band instrument)
Credit, degree applicable
Transfer CSU, UC

This ensemble rehearses and performs traditional, contemporary and popular band literature representing diverse styles and genres. Emphasis is placed on playing technique and musicianship. Performances are held on campus and in the community.

Note: Letter grade or P/NP option.

### Music 67abcd
**Big Band Jazz**
1.5 units; 3 hours lecture
Enrollment Limitation: audition at the first class meeting (ability to perform music of moderate difficulty on a standard jazz instrument)
Credit, degree applicable
Transfer CSU, UC

This 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 and 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 P/NP option.

### Music 68abcd
**Jazz Band**
1.5 units; 3 hours lecture
Enrollment Limitation: audition at the first class meeting (ability to perform music of moderate difficulty on a standard jazz instrument)
Credit, degree applicable
Transfer CSU, UC

This ensemble studies 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 P/NP option.

### Music 69abcd
**College Community Jazz Band**
1.5 units; 3 hours lecture
Enrollment Limitation: audition at the first class meeting (ability to perform music of moderate difficulty on a standard jazz instrument)
Credit, degree applicable
Transfer CSU, UC

This ensemble rehearses and performs literature for large jazz band ensemble. Emphasis is placed on section development, improvisation, and extended solos in a variety of styles from swing to contemporary jazz. Performances are held on and off campus.

Note: Letter grade or P/NP option.

### Music 70abcd
**Symphony Orchestra**
1.5 units; 3 hours lecture
Enrollment Limitation: audition at the first class meeting (ability to perform music of moderate difficulty on a standard orchestra) 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 P/NP option.

*Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center advisor, or the articulation officer.
Music 71abcd
Chamber Orchestra
1.5 units; 3 hours lecture
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 studies and performs works for string, chamber, and full orchestra with an emphasis on stylistic and historical performance practices, playing technique, and musicianship. Literature includes works for string and full orchestra as well as solo accompaniment. Performances are held on campus and in the community.
Note: Letter grade or P/NP option.

Music 72abcd
College Community Orchestra
1.5 units; 3 hours lecture
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 studies and performs compositions from the standard and popular orchestral repertoire. Emphasis is placed on stylistic and historical performance practices, playing techniques, and musicianship. Literature includes works for full orchestra as well as solo accompanying. Concerts are performed on and off campus.
Note: Letter grade or P/NP option.

Music 76abcd
Chamber Choir
1 unit; 2 hours lecture
Enrollment Limitation: ability to perform music of moderate difficulty on an instrument of the clarinet family
Credit, degree applicable
Transfer CSU, UC
This ensemble rehearses and performs literature scored for the balanced clarinet choir. Performances are held on campus and in the community.

Music 79abcd
Varsity Band
1.5 units; minimum 54 hours lecture per semester to be arranged
Enrollment Limitation: audition at the first class meeting (ability to perform music of moderate difficulty on a standard band instrument)
Credit, degree applicable
Transfer CSU, UC
The Varsity Band members prepare and perform music for athletic events and other scheduled college and community performances and events.
Note: Letter grade or P/NP option.

Music 80abc
[formerly Music 80]
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, and performance skills utilizing digital synthesizers in conjunction with computers and music software.

Music 81A
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.

Music 81B
Electronic Music Studio
2 units; 1 hour lecture, 2 hours lab
Prerequisite: Music 81A with a minimum grade of C or equivalent
Credit, degree applicable
Transfer CSU
This course is a continuation of Music 81A. It further explores the use of audio recording processes, synthesizers, computer hardware and software, and recording equipment.

Music 82abc
Digital Audio Recording for Commercial Music
3 units; 2 hours lecture, 3 hours lab
Prerequisite: Music 81A 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.

Music 83abcd
Keyboarding for Commercial Music
2 units; 1 hour lecture, 3 hours lab
Recommended Preparation: Music 1
Credit, degree applicable
Transfer CSU
This course is designed for students who plan to use the piano keyboard as a songwriting and music theory tool. Students will acquire a basic knowledge of intervals, chords, melodic voicing, and chord progressions used in the construction of commercial songs and in music arranging. Techniques in transcription and re-harmonization are also included.

Music 84
Commercial Music Business Studies
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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.

Music 85ab
Songwriting for Commercial Music
3 units; 2 hours lecture, 3 hours lab
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.

The hours per week of courses may be adjusted based on the length of the term.

*Some UC transferable courses have credit limitations.
For details, see a counselor, the Transfer Center advisor, or the articulation officer.
Music 501
The Joy of Music
0 units; 2 hours lecture (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)
Non-credit
This open entry/open exit course is repeatable and designed for older adults. It prepares students to attend selected concert events. Developed as part of the College's Music Appreciation Program, Joy of Music focuses on music, composers, performers, and music listening skills presented through lectures, video materials, and recorded examples. Emphasis is placed on folk, popular, ethnic, and Western art music. Joy of Music lectures are given at a variety of South Bay Senior Centers and at El Camino College.
Note: Students must attend pre-concert lectures in order to qualify for attendance at performance events.

Music 555
Community Choir for the Older Adult
0 units; 3 hours lecture (maximum of 54 hours per semester)
Non-credit
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.

Music 560
Woodwind Ensembles for the Older Adult
0 units; 2 hours lecture (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)
Non-credit
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.
Music 563
String Ensembles for the Older Adult
0 units; 2 hours lecture (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 string instrument)
Non-credit
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.

Music 565
Community Band for the Older Adult
0 units; 3 hours lecture (maximum of 54 hours per semester)
Enrollment Limitation: previous band or orchestra experience or ability to perform music of moderate difficulty on a standard band instrument
Non-credit
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.

Music 567
Jazz Band for the Older Adult
0 units; 3 hours lecture (maximum of 54 hours per semester)
Enrollment Limitation: audition (ability to perform music of moderate difficulty on a standard jazz instrument)
Non-credit
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.

Music 570
Orchestra for the Older Adult
0 units; 3 hours lecture (maximum of 54 hours per semester)
Enrollment Limitation: audition; previous band or orchestra experience or ability to perform music of moderate difficulty on a standard orchestral instrument
Non-credit
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.

Music 576
Clarinet Choir for the Older Adult
0 units; 2 hours lecture (maximum of 36 hours per semester)
Enrollment Limitation: audition (ability to perform music of moderate difficulty on an instrument of the clarinet family)
Non-credit
This ensemble for the older adult rehearses and performs literature scored for the balanced clarinet choir. Emphasis is placed on stylistic performance practices, instrumental techniques, and musicianship. Performances are held on campus and in the community.

Nursing
Nursing 48
Dosage Calculations
2 units; 3 hours lecture, 3 hours lab
Prerequisite: eligibility for Mathematics 73 or Mathematics 80
Credit, degree applicable
Transfer CSU
This course reviews and utilizes mathematical concepts needed in calculating accurate and safe medication dosages. Advanced problem solving, application of algebraic concepts, formulas, proportional relationships, systems of measurement, and measurement system conversions will be incorporated in the learning process. Designated lab time will be provided related to 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 physician orders, and evaluation of medication labels for safe medication administration.

Nursing 95/96abcd
Cooperative Work Experience Education
2-4 hours; to be arranged
Prerequisite: Nursing 150 with a minimum grade of C or equivalent or completion of current enrollment in the El Camino College Nursing Program
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 - limitations apply
Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Nursing 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 CWEE may not exceed 16 units.

Nursing 99abc
Independent Study
1-3 units; hours to be arranged
Enrollment Limitation: Two courses in Nursing with a minimum grade of C in each and acknowledgment by the instructor with whom the student will work.
Credit, degree applicable
Transfer CSU - limitations apply
This course provides advanced studies in a specialized nursing subject not covered in the regular departmental offerings. Regularly scheduled conferences with an instructor are coordinated with assigned laboratory work and/or research project (60 hours per unit).
Note: Refer to page 11 of this Catalog for eligibility requirements.

2010-2011 El Camino College Catalog
Nursing – A.S. Degree Registered Nursing

[Health Sciences and Athletics Division]

This degree provides the student with the skills to utilize the nursing process and assess unique clients of any age in terms of their basic human needs and structural variables. Degree competence will be assessed regularly by evaluations 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 to manage and provide skilled nursing care to individuals 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.

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. A comprehensive exit examination is required of all students completing the nursing program. Students take this exam during Nursing 255 and must achieve a statistically determined passing score prior to taking the NCLEX-RN examination. Students are eligible to take the licensing examination for registered nurses upon satisfactory completion of the nursing program. Graduates must pass the licensing examination (NCLEX-RN) in order to practice nursing in the state of California. The NCLEXRN, developed by the National Council of State Boards of Nursing, is administered by computer nationally throughout the year. The nursing program at El Camino College is approved by the California Board of Registered Nursing and is accredited by the National League for Nursing Accrediting Commission (NLNAC), 3343 Peachtree Road NE, Suite 500, Atlanta, GA 30326, (404) 975-5000.

Filing Period: The El Camino College Nursing Program accepts applications twice a year beginning the third Monday in September and the third Monday in March. Each application period will last for three weeks.

Prospective nursing students must complete the following steps in advance of the application filing period:

1. Complete the requirements for admission to the college.
2. Graduate from high school or earn a passing score on the General Equivalency Diploma (GED) or have earned an associate (AA) or higher degree.
3. Social Security Number: The state of California requires all RNs to have a valid social security number. Nursing students will be required to show proof of a valid social security number prior to entry into the nursing program.
4. Information Session: Attend a mandatory general information session for prospective nursing students.
5. Program Prerequisites: Complete the prerequisite courses to the Nursing Program with a minimum 2.5 grade point average.
6. GPA: Have a minimum cumulative GPA of 2.5 in all courses completed since high school.
7. Mathematics: Complete Intermediate Algebra (Mathematics 73 or 80 or equivalent) or pass the Mathematics Competency Exam.
8. Reading Assessment Test (DRP): Complete a reading assessment test with a passing score of 60 or greater. [If a student receives a score below 60, the student must complete remediation which includes enrolling in Academic Strategies 1abcd and completing the required 54 class hours]. *Please Note: The DRP test cannot be taken more than one time. If you do not pass with a score of 60 or above after one attempt, you must remediate before you can progress into the nursing program. This includes students who have taken the DRP test prior to Fall 2009.
9. Nursing 145: Complete or have in progress Nursing 145 "Introduction to Nursing." If the course is in progress, students must provide documentation of completion of the course to the Nursing Office by the end of the semester. (The course can only be taken here at El Camino College, Torrance or Compton Center.)
10. Transcripts:
   a. U.S. transcripts from all colleges attended since high school must be mailed directly to the ECC Crenshaw campus Admissions Office or the Compton Education Center Nursing Department. No hand carried transcripts will be accepted.
   b. All transcripts from outside the United States must be evaluated by an ECC-approved foreign evaluation service.

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Nursing

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c. Transcripts must be received by the admission office no later than August 1 for Fall applications and February 1 for Spring applications.
d. Students must confirm with the Admissions Office that transcripts have arrived prior to making a counseling appointment.

11. Nursing Counselors: Contact the counseling center to schedule an appointment with a nursing counselor.
a. Appointments should be scheduled well in advance of the application deadline but only after completing the steps above.
b. Counselors will review applicant’s documentation and if documentation is deemed complete, counselors will:
   i. Complete a Nursing Program Verification form.
   ii. Give the student a Nursing Program Application Form.
c. Students should submit the completed application form to the Admissions and Records office on the ECC Crenshaw campus or the Nursing Office on the Compton Education Center campus.

12. Applications: Applications for Compton will be given to the student from the Nursing Department office. Applicants for the Crenshaw campus will be given an application from the Nursing counselors. Applications for both campuses are only given once the counselor has completed the student "Nursing Program Verification" form.

Readiness Assessment (TEAS): The California Community College Chancellor’s Office has approved the use of Nursing Program Readiness tests throughout California. In order to enhance student success and reduce attrition, ECC will implement this test effective Spring 2009. Students who have completed the Test of Essential Academic Skills at another campus must go to www.ATitesting.com online store and request that your official TEAS result be sent to ECC. If a prospective student receives a score below the state recommended score, the student will be required to complete remediation. (Please see separate document entitled “ECC Nursing Program Readiness Testing and Remediation”).

Application Review: All complete applications will be reviewed and ranked according to Criteria 1-IV of the Multicriteria Enrollment Criteria. Students at the top of the ranking who have not taken the TEAS will be invited to take the TEAS test. Following completion of the 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 a conditional offer, applicants should print out any attached documents and choose one of the following options: 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 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 offer converts from a conditional place to a confirmed place. For more information, visit our website at www.elcamino.edu/nursing.

Waitlist: There will be no waitlist. Students who are not admitted to the program may reapply during the next application period. 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.

Board of Registered Nursing (BRN) Requirements: The BRN has approved a set curriculum at ECC which includes, in addition to nursing classes, Sociology, Psychology and a course in Communication and Analytical Thinking. (Please see document entitled, Sample Curriculum for Associate Degree Nursing Program. Note: these additional classes 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 Associate in Science Degree: In addition to the Nursing Department and Board of Registered Nursing course requirements, students must meet the El Camino A.S. degree general education requirements outlined in the college catalog. Please consult with nursing counselor if you have questions.

Nursing 116
Disabilities in the Developing Child
3 units; 3 hours lecture
Recommended Preparation: eligibility for English A
Credit, degree applicable
Transfer CSU
In this course students will study childhood disabilities, the effects of these conditions on the child’s development, and the overall impact on the family system. Topics will include typical and atypical development in the physical, cognitive, social, and emotional domains as well as the recognition, treatment, and care for children with disabling conditions. Students will also explore the role and responsibilities of the classroom special education assistant and the in-home respite care provider.

Note: This course is the same as Child Development 152.

Nursing 118
Respite Care for Children and Adolescents
3 units; 3 hours lecture
Recommended Preparation: eligibility for English A
Credit, degree applicable
This course introduces the student to the role and responsibilities involved in providing in-home respite care for the disabled child. Topics will include personal safety, community resources, legal parameters, ethical considerations, nutrition, physical positioning, activities, and procedures for home visits. Students will develop the skills necessary to organize and implement daily living activities in the client’s home.

Nursing 124
Basic Concepts of Nursing Pharmacology
1 unit; 1 hour lecture
Prerequisite: Mathematics 23 with a minimum grade of C or qualification by testing (El Camino College Placement Test) and assessment
Recommended Preparation: Anatomy 30
Credit, degree applicable
This course provides instruction in the basic concepts and principles of pharmacology for beginning nursing students. Mastery of the measurement systems used in nursing and drug dosage calculations are required to complete the course successfully.

Note: Completion of this course is required prior to enrollment in the Vocational Nursing Program.
Nursing

Program Prerequisites
In addition to meeting El Camino College’s requirements for admission, applicants must satisfy the program prerequisites listed below in order to be eligible for the Nursing Program.

• Attend a general orientation session for the prospective nursing students.
• Graduate from high school or earn acceptable scores on the G.E.D.
• Complete Mathematics 73 or 80 or higher level Mathematics course or pass the Mathematics Competency Test.
• Achieve a passing composite score on a nursing assessment/readiness test.
• Complete the following Nursing Program prerequisites with a minimum 2.5 GPA: Anatomy 30 or 32; English 1A, Microbiology 33, and Physiology 31. (Note: If a student earns only a grade of C in each of these prerequisite courses, then the 2.5 GPA requirement will not be met.)
• Earn a cumulative 2.5 GPA in all college work. In addition to meeting the above requirements, students must have official transcripts on file in the Records Office showing evidence of high school completion as well as all college and university credits earned. A student must also provide verification of criminal background clearance.

El Camino College Major Requirements
All general education courses and Nursing courses must be completed with a minimum grade of C. (Credit may be granted to transfer students for coursework completed at an accredited nursing program.) Nursing 145, 150, 151, 152, 153, 154, 155, 156, 250, 251, 252, 253, 254, 255
Total Units: 43.5

Advanced Standing
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. Specific information regarding the advanced placement procedure is available through the Counseling Center or the Nursing Department Office. 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. Note: Licensed Vocational Nurses who apply for advanced standing will be required to provide documentary evidence that they have been employed as a Licensed Vocational Nurse for a minimum of one year.

Option 1 - Upward Mobility and Transfer
Who is eligible for this option? Individuals eligible for this program include Licensed Vocational Nurses/Licensed Practical Nurses [LVN/LPNs], Licensed Psychiatric Technicians, and transfer students from accredited nursing program.

Prospective nursing students must complete the following steps in advance of the application filing period:
1. Complete the requirements for admission to the college.
2. Graduate from high school or earn a passing score on the General Equivalency Diploma (GED) or have earned an associate (AA) or higher degree.
3. Possession of a current California LVN/LPNs license [if applicable] and employment as LVN/LPNs for at least one year or more.
4. Social Security Number: The state of California requires all RNs to have a valid social security number. Nursing students will be required to show proof of a valid social security number prior to entry into the nursing program.
5. Information Session: Attend a mandatory general information session for prospective nursing students.
6. Program Prerequisites: Complete the prerequisite courses to the Nursing Program with a minimum 2.5 grade point average.
7. GPA: Have a minimum cumulative GPA of 2.5 in all remaining general education courses required for graduation.
8. Mathematics: Complete Intermediate Algebra [Mathematics 73 or 80 or equivalent] or pass the Mathematics Competency Exam. Note: Students who entered El Camino before fall 2009 and have maintained continuous enrollment [catalog rights] will meet the mathematics competency by completion of Elementary Algebra [Mathematics 40 or 43 or equivalent].

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Nursing

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9. Reading Assessment Test (DRP): Complete a reading assessment test with a passing score of 60 or greater. If a student receives a score below 60, the student must complete remediation which includes enrolling in Academic Strategies 1abcd and completing the required 54 class hours. You must schedule an appointment with the Testing Office located in the Student Services Center. A copy of the DRP score must be submitted with the application. * Please Note: The DRP test cannot be taken more than one time. If you do not pass with a score of 60 or above after one attempt, you must remediate before you can progress into the nursing program. This includes students who have taken the DRP test prior to Fall 2009.

10. Challenge Exam for Nursing 149 Entrance: Effective fall 2010, all upward mobility students (LVNs and transfer students) will be required to pass a challenge exam prior to entering Nursing 149. The Challenge exam will be based on the content from Nursing 150, Nursing 151, Nursing 152, and Nursing 153. Candidates will have two opportunities to take the challenge exam. If students fail the exam on the first attempt, they may retake the exam after a period of one semester. If students fail the exam a second time, they will not be considered eligible for the upward mobility program and must apply to enter the generic ADN program under the revised admission criteria.

11. Transcripts:
   a. U.S. transcripts from all colleges attended since high school must be mailed directly to the ECC Crenshaw campus Admissions Office or the Compton Education Center Nursing Department. No hand carried transcripts will be accepted.
   b. All transcripts from outside the United States must be evaluated by an ECC-approved foreign evaluation service.
   c. Transcripts must be received by the admission office no later than August 1 for Fall applications and February 1 for Spring applications.
   d. Students must confirm with the Admissions Office that transcripts have arrived prior to making a counseling appointment.

12. Transfer Credit: 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 or challenge process.

13. Transfer applicants from an accredited ADN nursing program must submit proof that he/she was a student in good standing and eligible to return to the institution from which the transfer is taking place.

14. An appeals process is available to students who are ineligible to return to the previous nursing program. The Appeals Process must be resolved before further consideration of the application is possible.

15. Nursing Counselors: Contact the counseling center to schedule an appointment with a nursing counselor.
   a. Appointments should be scheduled well in advance of the application deadline but only after completing the steps above.
   b. Counselors will review applicant’s documentation and if documentation is deemed complete, counselors will:
      i. Complete a Nursing Program Verification form.
   c. Students should submit the completed application form to the Admissions and Records office on the ECC Crenshaw campus or the Nursing Office on the Compton Education Center campus.

16. Applications: Applications for Compton will be given to the student by the Nursing Department office. Applicants for the Crenshaw campus will be given an application by the Nursing counselors. Applications for both campuses are only given once the counselor has completed the student ‘Nursing Program Verification’ form.

Application Review
1. Students who successfully pass the challenge exam will be admitted into the program via random drawing.
2. Selected students will then be notified via ECC email that they have been conditionally accepted into the nursing program. Upon receipt of a conditional offer, applicants should print out any attached documents and choose one of the following options: 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

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Nursing 128
Maternal Infant Vocational Nursing
2.5 units; 1.5 hours lecture, 3 hours lab
Prerequisite: Nursing 126 with a minimum grade of C
Enrollment Limitation: admission to the Vocational Nursing Program
Credit, degree applicable
This course provides instruction and clinical practice in nursing care related to the normal developmental phases and most common problems of the childbearing family. Byrne and Thompson’s theory of nursing and the nursing process serve as frameworks to analyze and plan for normal childbearing experiences.

Nursing 129
The Childrearing Family for Vocational Nurses
2.5 units; 1.5 hours lecture, 3 hours lab
Prerequisite: Nursing 126 with a minimum grade of C
Enrollment Limitation: admission to the Vocational Nursing Program
Credit, degree applicable
This course provides instruction and clinical practice in nursing care related to the normal developmental phases and most common problems of the childbearing family. Byrne and Thompson’s theory of nursing and the nursing process serve as frameworks to analyze and plan for normal childbearing experiences.

Nursing 130
Advanced Vocational Nursing I
7 units; 3.5 hours lecture, 10.5 hours lab
Prerequisite: Nursing 129 with a minimum grade of C
Enrollment Limitation: admission to the Vocational Nursing Program
Credit, degree applicable
This course provides instruction and clinical practice in advanced vocational nursing. Byrne and Thompson’s basic human needs theory of nursing and the nursing process are integrated and applied to assist clients with problems associated with physical integrity needs, affiliative and sexual needs, mental health problems and other common related issues. Clinical practice sites include ambulatory care clinics and community agencies.

The hours per week of courses may be adjusted based on the length of the term.
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 offer converts from a conditional place to a confirmed place.

Waitlist: There will be no waitlist. Students who are not admitted to the program may reapply during the next application period. 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.

Board of Registered Nursing (BRN) Requirements: The BRN has approved a set curriculum at El Camino which includes, in addition to nursing classes, Sociology, Psychology and a course in Communication and Analytical Thinking. Note: these additional classes 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 Associate in Science Degree: In addition to the Nursing Department and Board of Registered Nursing course requirements, students must meet the El Camino A.S. degree general education requirements outlined in the college catalog. Please consult with 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 orientation sessions are available each semester to assist prospective applicants so they may learn more about careers in nursing, the El Camino nursing program and its requirements, and how to formulate an educational plan to become a qualified applicant. Nursing courses must be taken in sequence.

The Advanced Placement Option requires that a student take the following courses: all required general education courses for a A.S. Degree in Nursing and Nursing 149, 150, 151, 152, 153, 154, 155, 156, 250, 251, 253, 254, and 255. All nursing courses may be taken in sequence. Upon admission to the Nursing Program [Nursing 149], the upward mobility student will be integrated within the generic program. However, the upward mobility student may receive credit by examination through the challenge process for the following nursing courses: Nursing 155, 156, 250, 251, 253, 254, and 255. All nursing courses may be challenged. A student who attends an orientation but does not attend the first day of class will be dropped from the program and transition into the Licensed Vocational Nursing Program and will not be eligible to reapply.

In addition to the Nursing Department and Board of Registered Nursing course requirements, students must meet the El Camino A.S. degree general education requirements outlined in the college catalog. General Education requirements can be taken during or before applying for the Nursing Program. Note: Students who enrolled beginning fall 2006 through spring 2009 will need to take a course from Area 2A or 2B of the A.S. General Education requirements. Please consult with a nursing counselor if you have any questions regarding the degree requirements.

General Education Requirements: English 1B, Psychology 5, Sociology 101, Communication & Analytical Thinking

Option II – 30 Unit Non-Degree Track
Who is eligible for this option? 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.

Nursing 131
Professional Issues for Vocational Nurses
1 unit; 1 hour lecture
Prerequisite: Nursing 126 with a minimum grade of C
Enrollment Limitation: admission to the Vocational Nursing Program
Credit, degree applicable
This course provides instruction in ethical and legal issues as well as regulatory and policy standards regarding the practice of vocational nursing in California. Career opportunities in nursing will be explored for employment as a Licensed Vocational Nurse.

Nursing 132
Advanced Vocational Nursing II
7 units; 5.5 hours lecture, 10.5 hours lab
Prerequisite: Nursing 130 with a minimum grade of C
Enrollment Limitation: admission to the Vocational Nursing Program
Credit, degree applicable
This course provides instruction and clinical practice in leadership within the vocational nursing scope of practice. Content includes nursing theory and the leadership and management skills needed to care for groups of stable patients with complex health care needs. Practice sites include long-term care facilities, ambulatory care facilities, and other community health care agencies.

Nursing 133
Transition to Licensed Vocational Nursing
1 unit; 1 hour lecture
Prerequisite: Nursing 131 with a minimum grade of C
Enrollment Limitation: admission to the Vocational Nursing Program
Credit, degree applicable
This course provides instruction and support for the student who will complete the program and transition into the Licensed Vocational Nurse role. Legal and practical aspects of obtaining a license in California will be studied. Issues of importance to the beginning nurse, such as supervision, delegation and management of nursing care will be emphasized.

*Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center advisor, or the articulation officer.
Prospective nursing students must complete the following steps in advance of the application filing period:

1. Complete the requirements for admission to the college.
2. Graduate from high school or earn a passing score on the General Equivalency Diploma (GED) or have earned an associate (AA) or higher degree.
3. Possession of a current California LVN/LPNs license (if applicable) and employment as LVN/LPNs for at least one year or more.
4. Social Security Number: The state of California requires all RNs to have a valid social security number. Nursing students will be required to show proof of a valid social security number prior to entry into the nursing program.
5. Information Session: Attend a mandatory general information session for prospective nursing students.
6. Program Prerequisites: Complete the prerequisite courses to the Nursing Program with a minimum 2.0 grade point average.
7. GPA: Have a minimum cumulative GPA of 2.0 in all remaining general education courses required for graduation.
8. Reading Assessment Test (DRP): Complete a reading assessment test with a passing score of 60 or greater. (If a student receives a score below 60, the student must complete remediation which includes enrolling in Academic Strategies 1abcd and completing the required 54 class hours). *Please Note: The DRP test cannot be taken more than one time. If you do not pass with a score of 60 or above after one attempt, you must remediate before you can progress into the nursing program. This includes students who have taken the DRP test prior to Fall 2009.
9. Transcripts:
   a. U.S. transcripts from all colleges attended since high school must be mailed directly to the ECC Crenshaw campus Admissions Office or the Compton Education Center Nursing Department. No hand carried transcripts will be accepted.
   b. All transcripts from outside the United States must be evaluated by an ECC-approved foreign evaluation service.
   c. Transcripts must be received by the admission office no later than August 1 for fall applications and February 1 for spring applications.
   d. Students must confirm with the Admissions Office that transcripts have arrived prior to making a counseling appointment.
10. Nursing Counselors: Contact the counseling center to schedule an appointment with a nursing counselor.
   a. Appointments should be scheduled well in advance of the application deadline but only after completing the steps above.
   b. Counselors will review applicant’s documentation and if documentation is deemed complete, counselors will:
      i. Complete a Nursing Program Verification form.
      ii. Give the student a Nursing Program Application Form.
   c. Students should submit the completed application form to the Admissions and Records office on the ECC Crenshaw campus or the Nursing Office on the Compton Education Center campus.
11. Applications: Applications for Compton will be given to the student from the Nursing Department office. Applicants for the Crenshaw campus will be given an application from the Nursing counselors. Applications for both campuses are only given once the counselor has completed the student “Nursing Program Verification” form.

Application Review: There is limited enrollment and applicants are accepted as space is available. Selected students will then be notified via ECC email that they have been conditionally accepted into the nursing program. Upon receipt of a conditional offer, applicants should print out any attached documents and choose one of the following options: 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 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 offer converts from a conditional place to a confirmed place.

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Nursing

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**Waitlist:** There will be no waitlist. Students who are not admitted to the program may reapply during the next application period. 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.

**Option II – 30 Unit Course Requirements**
The program includes advanced experience in a health care setting that correlates with classroom instruction in theory. The student must perform satisfactorily in the clinical area to receive credit in any nursing course. A grade of "C" (75%) or better is necessary in all nursing courses taken.
The following courses are required in the 30-Unit Non-Degree Track: Microbiology 33 or equivalent, Nursing 149, 154, 251, 253, 254, and 255, Physiology 31 or equivalent.

**Associate Degree for the Diploma Graduate Option**
This option, required by the Board of Registered Nursing, is designed for licensed diploma RNs. The option allows a licensed diploma RN to earn credit for previous educational preparation. Specific general education or science courses, selected on a case-by-case basis, must be completed to fulfill the requirements for the Associate in Science degree with a major in Nursing. Transcript evaluation will allow up to a maximum of 34 units of credit.

**General Program Information**

**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. Nursing Assistant certification is highly desirable for entry into the nursing program.

**Program Readmission and Course Repetition:** Students who leave the nursing program [self or faculty initiated] are eligible to be re-admitted to the program subject to availability of space. Only one single nursing course, in which a student has received a D or F grade, may be repeated. The repeat and stop out policy is available for review in the Nursing 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 for completion before re-entry. Students not eligible to re-enter the program may individually appeal their re-entry status through the Acceptance, Transfer and Progression Committee.

**Bachelor of Science in Nursing:** Students intending to pursue a Bachelor of Science degree in Nursing should consult a Nursing counselor.

**California State Licensure**

**Special Note Regarding Licensure:** All graduates of the Nursing Program are eligible to take the National Licensing Examination (NCLEX) and must pass the exam to practice in California. 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 California Board of Registered Nursing (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.

**Accreditation:** The Nursing Program is approved by the California Board of Registered Nursing and accredited by the National League for Nursing Accrediting Commission, 3343 Peachtree Road NE, Suite 500, Atlanta, GA 30326 [404] 975-5000.

**Nursing 151 Human Development and Health**

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<th>2 units; 2 hours lecture</th>
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<tr>
<td>Enrollment Limitation: admission to the Nursing Program</td>
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<td>Credit, degree applicable</td>
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<td>Transfer CSU</td>
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This course focuses on the various factors that affect human development from conception through death. Normal biopsychosocial development is emphasized and commonly occurring deviations are examined and analyzed. The course also focuses on health problems and concerns unique to each stage of growth and development. The nurse's role in analyzing problems and providing care throughout the life span is explored.

**Nursing 152 Introduction to Nursing Pharmacology**

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<th>1 unit; 1 hour lecture</th>
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<tr>
<td>Enrollment Limitation: admission to the Nursing Program</td>
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<tr>
<td>Credit, degree applicable</td>
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<td>Transfer CSU</td>
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</table>

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.

**Nursing 153 Intermediate Nursing Process I**

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<th>4.5 units; 2 hours lecture, 7.5 hours lab</th>
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<tbody>
<tr>
<td>Prerequisite: Nursing 150, Nursing 151, and Nursing 152 with a minimum grade of C in prerequisite</td>
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<td>Credit, degree applicable</td>
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<td>Transfer CSU</td>
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This course will assist the student in meeting the needs of adult clients with moderately severe disruptions to health. Theory and utilization of the nursing process will focus on pathophysiological problems associated with the pre-operative and post-operative periods. Students will examine problems associated with the physical integrity, respiratory, activity-rest, ingestive, excretory, and sexual needs.

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The hours per week of courses may be adjusted based on the length of the term.
This course offers an in-depth study of Nursing 156 pathophysiologies of normal and abnormal conditions. Students will compare and contrast the lymphatic, head, eyes, ears, nose, and throat (HEENT), and neurological systems. Students will compare and contrast the pathophysiologies of normal and abnormal assessments and document their findings.

Nursing 155
Health Assessment
1 unit; 0.5 hour lecture, 1.5 hours lab
Prerequisite: Nursing 150, Nursing 151, and Nursing 152 with a minimum grade of C in prerequisite course
Credit, degree applicable
Transfer CSU
In this course, students will develop and practice health assessment skills. The focus will be on gathering data for health histories and performing physical assessments on the cardiac, respiratory, peripheral vascular, abdominal, musculoskeletal, lymphatic, head, eyes, ears, nose, and throat (HEENT), and neurological systems. Students will compare and contrast the pathophysiologies of normal and abnormal assessments and document their findings.

Nursing 156
Advanced Nursing Pharmacology
1 unit; 1 hour lecture
Prerequisite: Nursing 150, Nursing 151, and Nursing 152 with a minimum grade of C in prerequisite course
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.

Nursing 210
Implications of Pathophysiology Concepts for Nurses
2 units; 2 hours lecture
Prerequisite: Nursing 153 with a minimum grade of C or equivalent or Licensed Registered Nurse
Credit, degree applicable
Transfer CSU
In this course, the student will explore the effect of illness on the human body. Common disorders of the major body systems are used to illustrate the effect of diseases on the body. Clinical applications of the concepts of pathophysiology will assist the nurse in providing effective, scientifically based patient care.

Nursing 212
Basic Perioperative Nursing
13 units; 9 hours lecture, 19.5 hours lab
Enrollment Limitation: Licensed Registered Nurse who has obtained a clinical site for 24 hours per week of clinical preceptorship in the operating room
Credit, degree applicable
Transfer CSU
This course is designed for registered nurses who have had no previous experience in the operating room. Upon completion of the course, the nurse will be qualified to practice at an entry-level perioperative position in either an acute care hospital or an outpatient surgery center. Course content includes the care of the perioperative patient during all phases of the operative experience. Emphasis will be placed on those functions required during the intraoperative phase, including the functions of the circulating nurse and the scrub nurse during a variety of surgical procedures.

Nursing 250
Intermediate Nursing Process and the Family
5.5 units; 3 hours lecture, 7.5 hours lab
Prerequisite: Nursing 153, Nursing 154, Nursing 155, and Nursing 156 with a minimum grade of C in prerequisite course
Credit, degree applicable
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.

Nursing 251
Legal and Ethical Considerations in Nursing
1 unit; 1 hour lecture
Prerequisite: Nursing 150 and Nursing 151 with a minimum grade of C in prerequisite course
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.

Nursing 253
Intermediate Nursing Process II
4.5 units; 2 hours lecture, 7.5 hours lab
Prerequisite: Nursing 153, Nursing 154, Nursing 155, and Nursing 156 with a minimum grade of C in prerequisite course
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.

Nursing 254
Advanced Nursing Process I
7 units; 3 hours lecture, 12 hours lab
Prerequisite: Nursing 250, Nursing 251, and Nursing 253 with a minimum grade of C in prerequisite course or equivalent
Credit, degree applicable
Transfer CSU
This course focuses on pathophysiologic concepts and nursing management essential to critical care and emergency nursing. Clients with acute and chronic cardiopulmonary, hepatic, renal, and multi-system failure 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 clients with multiple need imbalances. The role of the nurse in the management of client care following a disaster is presented.

2010-2011 El Camino College Catalog
Nursing 255
Advanced Nursing Process II – Clinical Preceptorship
2.5 units; 135 hours of lab to be arranged over four weeks
Prerequisite: Nursing 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.

Nutrition and Foods

Nutrition and Foods 11
Nutrition
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 84
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 nutrition throughout the life cycle, dietary analysis, current nutrition trends, food safety, and physical fitness.

Nutrition and Foods 15
Nutrition for Infants and Young Children
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 84
Credit, degree applicable
Transfer CSU
In this course students will study the nutritional needs in the growth and development of infants and young children. Topics include nutritional assessment, food safety, government resources, menu planning, and integrating nutrition education into early childhood education programs.

Nutrition and Foods 50
Special Topics in Nutrition and Foods
Units determined by individual course; lecture/lab hours determined by individual course
Credit status determined by individual course
This course is designed to explore topics in Nutrition and Foods more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

Nutrition and Foods 99abc
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 - limitations apply
This course is designed to explore topics in Nutrition and Foods more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

Oceanography

Oceanography 10
Introduction to Oceanography
4 units; 3 hours lecture, 3 hours lab
Recommended Preparation: eligibility for English 84
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.

Oceanography 50
Special Topics in Oceanography
Units determined by individual course; lecture/lab hours determined by individual course
Credit status determined by individual course
This course is designed to explore topics in Oceanography more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

Optometry
See Pre-Optometry
Paralegal Studies – A.A. Degree and Certificate of Achievement

(Business Division)

This program is approved by the American Bar Association.

The degree and certificate are designed to train students to assist lawyers in private firms, legal departments of companies, or governmental agencies. The American Bar Association (ABA) required general education aids in transfer of the legal assistant student to a university. Upon successful completion of the program requirements, the student will have the ability to apply theories and principles of law, prepare or interpret legal documents, draft pleadings including court forms, prepare for litigation, apply legal ethics, case management techniques, and skills for client interaction, and research the law, including on-line legal research. Competency will be assessed regularly by examinations and projects.

El Camino College Major Requirements
Entrance to the program is gained by successful completion of Law 11, Introduction to Legal Research.

Paralegal Studies Major Requirements: Paralegal Studies 1; Law 4 or Law 5; Law 11, 16, 17, 19, 20; four courses from the following: Law 6, 12, 13, 14, 15, 18, 95abcd (3 or 4 units), Real Estate 12A
Total Units: 31-32

In-Residence Requirements: A total of 15 units of Legal Specialty courses including Law 11, 17, 20; and six additional units selected from Law 12, 13, 14, 15, 16, 18, or 19 must be taken at El Camino College for the degree.

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.

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, Section 6125.

Certificate of Achievement
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.

Paralegal Studies Certificate Requirements: Paralegal Studies 1; Law 4 or Law 5; Law 11, 16, 17, 19, 20; four courses from the following: Law 6, 12, 13, 14, 15, 18, Law 95abcd (3 or 4 units), Real Estate 12A
Total Units: 31-32

In-Residence Requirements: A total of 15 units of Legal Specialty courses including Law 11, 17, 20, and six additional units selected from Law 12, 13, 14, 15, 16, 18, or 19 must be taken at El Camino College for the certificate.

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.

*Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center advisor, or the articulation officer.
Philosophy – A.A. Degree

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.

El Camino College Major Requirements
Philosophy 3, 5 or 8; Philosophy 10, 11;
two courses from: Philosophy 2, 7, 12, 14, 23;
one course from: History 141, English 23, 31, 36
Total Units: 21

Preparation for the 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.

Philosophy

Philosophy 2
Introduction to Philosophy
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 1A
Credit, degree applicable
Transfer CSU, UC
This course examines the main areas of philosophy, which include ethics, epistemology, and metaphysics. Students will explore values and beliefs, moral actions, freedom, the soul and God, and what constitutes a fulfilling life.

Philosophy 3
Ethics and Society
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 1A
Credit, degree applicable
Transfer CSU, UC
This course offers a critical study of the ethical theories and their application to problems of modern society. Ethical issues in government and law, social institutions, the arts, and international relations will be emphasized.

Philosophy 4
Introduction to Logic
3 units; 3 hours lecture
Prerequisite: English 1A with a minimum grade of C
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 principal ancient and medieval philosophies of this time period. Topics include Greek and Roman thought, and the rise and development of Christianity.

Philosophy 5
Critical Thinking and Discourse
3 units; 3 hours lecture
Prerequisite: English 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.

Philosophy 6
Philosophy of Religion
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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 problem of evil; the nature of religious language; the existence of miracles; religious experience; and mysticism. The rationality of religious belief will also be examined.

Philosophy 7
Existentialism
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 1A
Credit, degree applicable
Transfer CSU
This course will examine the philosophical thought of the two strands of existentialist writers: the religious existentialist 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.

The hours per week of courses may be adjusted based on the length of the term.
Philosophy 14
Asian Philosophy
3 units; 3 hours lecture
Recommended Preparation: eligibility for English IA
Credit, degree applicable
Transfer CSU
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.

Philosophy 23
Ethics, Law and Society
3 units; 3 hours lecture
Recommended Preparation: eligibility for English IA
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.

Philosophy 50
Special Topics in Philosophy
Units determined by individual course; lecture/lab hours determined by individual course
Credit status determined by individual course
This course is designed to explore topics in Philosophy more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

Philosophy 99abc
Independent Study
1-3 units; hours to be arranged
Enrollment Limitation: two courses in Philosophy with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work
Credit, degree applicable
Transfer CSU, UC - limitations apply
This course provides advanced studies in a subject field of Philosophy not covered in the regular departmental offerings. Regular conferences will be held with the instructor to discuss and coordinate the assigned projects (60 hours per unit).

Note: Refer to page 11 of this Catalog for eligibility requirements.

Photography – A.S. Degree and Certificate of Achievement
(Fine Arts Division)

The degree or certificate 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.

El Camino College Major Requirements
A minimum of 12 units must be completed at El Camino College. Photography 10 or Journalism 6 or Photography 51; Photography 1, 2, 3, 23A; a minimum of six units from: Photography 4, 11ab* or Journalism 7ab*, 23B, 54, 57, Art 141abcd*, Film/Video 22; three units from: Art 37ab, 142abcd, Business 11, 12, Physics 11 (*Only one semester of the course will be credited toward the major requirements.)
Recommended Electives: Art 1, 10ab, 143abcd; Business 20, 24
Total Units: 26

Certificate of Achievement
A Certificate of Achievement will be awarded to the student who completes the following courses: Photography 10 or Journalism 6 or Photography 51; Photography 1, 2, 3, 23A; and at least 9 units from the following: Photography 4, 11ab* or Journalism 7ab* (*one semester) 23B, 54, 57
At least 50% of the courses for the certificate must be taken at El Camino College.
Total Units: 26

Photography

Photography 1
Basic Photography
3 units; 2 hours lecture, 3 hours lab
Prerequisite: Photography 10 or Photography 51 with a minimum grade of C in prerequisite or equivalent
Credit, degree applicable
Transfer CSU
This course focuses on photography as a black and white still photography with an emphasis on the use of the 4 x 5 view camera, photographic equipment and materials; photographic chemistry and mathematics, optics and physics of light; composition lighting and creative expression. Laboratory techniques including film processing and print making are an integral part of this course.

Note: The maximum UC credit allowed for students completing Photography 1 and Photography 51 is one course.

Photography 2
Intermediate Photography
4 units; 2 hours lecture, 6 hours lab
Prerequisite: Photography 1 with a minimum grade of C
Credit, degree applicable
Transfer CSU
This class emphasizes photography as a creative art. The basics of commercial portraiture, still life and fine art photography are covered. Intermediate photographic lighting and black and white printing skills are introduced.

Photography 3
Advanced Photography
4 units; 2 hours lecture, 6 hours lab
Prerequisite: Photography 2 with a minimum grade of C
Credit, degree applicable
Transfer CSU
This course focuses on photography as a commercial and creative practice. The basics of business practices for the photographer along with fashion, industrial and advertising/product photography are covered. Advanced lighting and printing skills are introduced. The production of portfolio quality black and white photographic prints and color transparencies is emphasized.

The hours per week of courses may be adjusted based on the length of the term.

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Photography 4

Portraiture
3 units; 2 hours lecture, 3 hours lab
Prerequisite: Photography 1 with a minimum grade of C
Credit, degree applicable
Transfer CSU
This is a course in black and white 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 35mm and 4" x 5" camera equipment for portrait work. Laboratory techniques include film processing, print making and lighting design construction.

Photography 10

Basic Photojournalism
2 units; 1 hour lecture, 3 hours lab
Recommended Preparation: eligibility for English 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.

Photography 11ab

Advanced Photojournalism
2 units; 1 hour lecture, 3 hours lab
Prerequisite: Journalism 6 or Photography 10 with a minimum grade of C 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.

Photography 23A

Theory of Color/Color Printing
4 units; 2 hours lecture, 6 hours lab
Prerequisite: Photography 23A with a minimum grade of C
Credit, degree applicable
Transfer CSU
This course covers the theory and techniques of color still photography. Emphasis is placed on the processing of various types of color negative film, color printing and color cast correction. Color theory, the psychology of color, and the effects of various light sources on color temperature are included.

Photography 23B

Intermediate Color
Photography/Color Printing
4 units; 2 hours lecture, 6 hours lab
Prerequisite: Photography 23A
Credit, degree applicable
Transfer CSU
This course covers the advanced theory and practice of color still photography with an emphasis on the construction, processing and printing of color positive materials. The additive color process and contrast masking will be introduced as well as techniques for printing color transparencies on color reversal paper, for printing and processing photographic prints from color negatives, and for making color balanced prints.

Photography 51

Elementary Photography
2 units; 1 hour lecture, 3 hours lab
Prerequisite: Photography 1 with a minimum grade of C
Credit, degree applicable
Transfer CSU
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.

Photography 54

Intermediate 35mm Black and White Photography
2 units; 1 hour lecture, 3 hours lab
Prerequisite: Photography 51
Credit, degree applicable
Transfer CSU
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.

Photography 57

Creative Photographic Processes
2 units; 1 hour lecture, 3 hours lab
Prerequisite: Photography 54
Credit, degree applicable
Transfer CSU
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.

*Some UC transferable courses have credit limitations.
For details, see a counselor, the Transfer Center advisor, or the articulation officer.
Photography 99abc  
**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 - limitations apply  
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 (60 hours per unit).  
Note: Refer to page 11 of this Catalog for eligibility requirements.

Photography 150  
**The Art of Photography**  
3 units; 3 hours lecture  
Recommended Preparation: eligibility for English 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 an art. The course will also cover the aesthetic and cultural impact of photography as an 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 Art 150 or Photography 150.

Photography 151ab  
**The Art of Photography Digital Laboratory**  
1 unit; 3 hours lab  
Prerequisite: Art 150 or Film/Video 22 or Photography 51 with a minimum grade of C in prerequisite or concurrent enrollment  
Credit, degree applicable  
Transfer CSU  
This course introduces the computer as a tool for manipulating photographic images. Topics include digital image input, scanning, and various types of digital output. Emphasis is placed on the artistic possibilities of the image.  
Note: Art 151ab is the same course as Art 151ab. Credit is limited to Art 151ab or Photography 151ab.

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**Physical Education – A.A. Degree**  
*Health Sciences and Athletics Division*  
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 qualify to pursue advanced degree options or entry-level positions in the discipline.

**El Camino College Major Requirements**  
Anatomy 30, Psychology 5, Physical Education 277, 280, First Aid 1; plus 8 units of activity-units distributed over a minimum of 4 activity categories to include: Aquatics: Physical Education 240abcd, 241abcd, 242abcd, 243abcd, 244ab; Combatives: Physical Education 14abcd, 220abcd, 221abcd; Court/Racquet: Physical Education 4abcd, 232abcd, 251abcd, 253abcd; Dance: Dance 10, 12, 14ab, 16ab, 18ab, 19ab, 22ab, 23abcd, 32ab, 33abcd, 42ab, 43abcd, 61ab, 62abcd; Fitness: Physical Education 1abcd, 2abcd, 54abcd, 101abcd, 102abcd, 135abcd, 245abcd, 260, 285abcd, 300abcd, 302abcd; Individual Sports: Physical Education 24abcd, 208abcd, 224abcd; Team Sports: Physical Education 4abcd, 7abcd, 74abcd, 204abcd, 238abcd, 253abcd.  
Note: Up to 4 units of intercollegiate sports can be counted toward the required 8 activity units.  
Total Units: 24

**Preparation for the 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**

**Physical Education General Courses**

**Physical Education 50**  
**Special Topics in Physical Education**  
Units determined by individual course; lecture/lab hours determined by individual course  
Credit status determined by individual course  
This course is designed to explore topics in Physical Education more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

**Physical Education 217**  
**Sports Officiating**  
2 units; 2 hours lecture, 3 hours lab  
Recommended Preparation: eligibility for English A or 84  
Credit, degree applicable  
Transfer CSU, UC*  
This course provides instruction and practice in the basic principles and applications of sports officiating. Emphasis is placed on a broad range of topics including officiating objectives, conduct, communication skills, conflict management, fitness and injury prevention, legal rights and responsibilities, and career development.

**Physical Education 277**  
**Introduction to Kinesiology and Physical Education**  
3 units; 3 hours lecture  
Recommended Preparation: eligibility for English A or 84  
Credit, degree applicable  
Transfer CSU, UC  
This course introduces the academic disciplines of kinesiology and physical education through an examination of their historical, professional, and philosophical foundations. Specialties such as exercise science, biomechanics, athletic training, fitness, teaching, coaching, sport psychology, and adapted physical education are surveyed for their scope and career options.

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Note: The hours per week of courses may be adjusted based on the length of the term.

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Physical Education Coeducational Activity Courses

Physical Education 1abcd
(formerly Physical Education lab)

Body Conditioning and Physical Fitness
1 unit; 3 hours lab
Credit, degree applicable
Transfer CSU, UC*

This course is designed to provide students with a fitness foundation through the means of cardiorespiratory endurance training, muscular strength and endurance training, and flexibility exercises. A student will be given a fitness assessment profile and then will develop an individualized exercise prescription. Student progress of fitness will be monitored and assessed regularly to assure completion of goals and objectives.

Physical Education 2abcd
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. Instruction will include examination of gait patterns utilized under different walking conditions. 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.

Physical Education 3abcd
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.

Physical Education 4abcd
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.

Physical Education 7abcd
(formerly Physical Education 7ab)
Baseball
1 unit; 2 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.

Physical Education 14abcd
 Bunifu
1 unit; 2 hours lab
Credit, degree applicable
Transfer CSU, UC*

This course examines the basic skills, rules, etiquette, and strategies for boxing. Students will be introduced to the correct body position and footwork as well as the principles and mechanics of the basic punches and defenses. The training aspects of boxing as well as conditioning and fitness strategies will be covered.

Physical Education 47abcd
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 class will also facilitate critical thinking and problem solving skills.

Physical Education 54abcd
Weight Training
1 unit; 3 hours lab
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.

Physical Education 74abcd
Soccer
1 unit; 2 hours lab
Credit, degree applicable
Transfer CSU, UC*

This course offers soccer instruction, practice, and competitive play that is suited for students of every skill level. Basic and advanced technical skills, laws of the game, tactics and strategies and set plays will be presented with the aim of improving the student’s current ability level. Exercise training specific to the physical demands of soccer will be included along with discussions on the mental aspects of the sport and prevention of soccer related injuries. Students successfully completing this course will acquire the skills and knowledge to enjoy soccer as a lifelong sport.

Physical Education 101abcd
Physical Fitness and Aging
2 units; 1 hour lecture, 2 hours lab
Recommended Preparation: none
Credit, degree applicable
Transfer CSU, UC*

This course is designed to develop an understanding of the benefits and health enhancing values of exercise for older adults. Strength training, cardiorespiratory fitness and stretching exercises will be performed to enhance physical fitness, bone density, body composition and posture. Training strategies suited for older adults and physical fitness assessments will also be implemented.

Note: Letter grade or P/NP option.

*Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center advisor, or the articulation officer.
This course provides an introduction to 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.

Physical Education 208abcd Bowling
1 unit; 2 hours lab
Credit, degree applicable
Transfer CSU, UC*
This course examines the basic skills, rules, etiquette, scoring, and playing strategies for the activity of bowling. Students will be introduced to the mechanics of stance, delivery, and follow-through as well as proper grip of the ball. In this course, students will examine and practice the physical and mental skills required to succeed in this lifetime activity. Students will also participate in league play during the semester.

Physical Education 220abcd 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 mental focus, self-discipline and self-confidence. Culture, philosophy and historical concepts with Naginata will also be discussed.

Physical Education 201 Introduction to Adapted Physical Education
2 units; 2 hours lecture
Recommended Preparation: English 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.

Physical Education 204abcd Badminton
1 unit; 2 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.

Physical Education 221abcd Defense Tactics
1 unit; 2 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, and kicks as well as ground defense strategies. Defense against the headlock, bear hug, lapel grab, chokes, and confrontational situations will also be examined. Physical conditioning and fitness specific to that needed to perform self-defense strikes will be emphasized. Prevention of training related injuries will be addressed through proper warm up and stretching.

Physical Education 224abcd Golf
1 unit; 2 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.

Physical Education 232abcd Racquetball
1 unit; 2 hours lab
Credit, degree applicable
Transfer CSU, UC
Students will be introduced to racquetball equipment, safety, rules, regulations, strokes, and tactics. The course will ensure that the student has the physical and mental skills required to succeed in this lifetime activity.

Physical Education 238abcd Slow Pitch Softball
1 unit; 2 hours lab
Credit, degree applicable
Transfer CSU, UC*
This course offers instruction in slow pitch softball, practice, and competitive play suited for students of every skill level. 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 the prevention of related injuries. Students successfully completing this course will acquire the skills and knowledge to enjoy slow pitch softball as a lifelong sport.

*Some UC transferable courses have credit limitations.
For details, see a counselor, the Transfer Center advisor, or the articulation officer.
Physical Education 240abcd

**Beginning Swimming**

1 unit; 2 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 side stroke. Beginning diving skills and treading water along with basic water safety and rescues will be demonstrated and practiced.

*Note: Letter grade or P/NP option.*

Physical Education 241abcd

**Intermediate/Advanced Swimming**

1 unit; 2 hours lab
Prerequisite: one semester of PE 240abcd with a minimum grade of C
Credit, degree applicable
Transfer CSU, UC*

This course is designed for intermediate and advanced swimmers. Emphasis is on refinement of freestyle, backstroke, elementary backstroke, and sidestroke through instruction and practice. Butterfly and breaststroke skills, as well as flip turns, will be introduced.

*Note: Letter grade or P/NP option.*

Physical Education 242abcd

**Swimming, Lifeguard Training**

1 unit; 1 hour lecture, 1 hour lab
Recommended Preparation: English 84
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, Waterfront Lifeguard, Lifeguard Management, First Aid, and Cardiopulmonary Resuscitation (CPR) for the professional rescuer. 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. Instruction with certification is also incorporated into the course for automated external defibrillation (AED) and oxygen administration.

*Note: Certification requires passing both ARC practical and written examinations.*

*Note: This course is offered fall semester only.*

The hours per week of courses may be adjusted based on the length of the term.

Physical Education 243abcd

**Swimming, Water Safety Instructor**

2 units; 1 hour lecture, 3 hours lab
Recommended Preparation: English 84
Enrollment Limitation: American Red Cross Mandate - 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 Instructor (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.*

*Note: This course is offered spring semester only.*

Physical Education 244abcd

(formerly Physical Education 244ab)

**Springboard Diving**

1 unit; 2 hours lab
Prerequisite: ability to swim in deep water
Credit, degree applicable
Transfer CSU, UC*

This course provides instruction and practice in springboard diving. Each of the five dive groups, forward, inward, backward, reverse, and twisting, will be analyzed with regard to rules and mechanics.

Physical Education 245abcd

**Water Aerobics**

1 unit; 2 hours lab
Credit, degree applicable
Transfer CSU, UC*

Instruction focuses on aerobic conditioning done in water. Emphasis is placed on cardio-respiratory endurance, flexibility, muscular strength, and endurance.

Physical Education 246abcd

**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, breast stroke, and butterfly].

Physical Education 250abcd

**Techniques of Surfboard Riding**

1 unit; 3 hours lab
Prerequisite: Physical Education 240abcd with a minimum grade of C or equivalent
Enrollment Limitation: Must be able to swim three hundred 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 furnish their own surfboards and protective wetsuits to off-campus sites at local beaches.*

Physical Education 251abcd

**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 students at every skill level. Basic and advanced 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. Exercise training specific to the physical demands of tennis will be included along with discussions on the mental aspects of the sport and prevention of tennis-related injuries. Students successfully completing the course will acquire adequate skills and knowledge to enjoy tennis as a lifelong sport.

Physical Education 253abcd

**Volleyball**

1 unit; 2 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 the indoor and outdoor games will be covered. Specific conditioning for the game of volleyball is also incorporated.
Physical Education 256abcd
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.

Physical Education 260
Basic Principles of Fitness and Weight Control
1 unit; 1 hour lecture
Corequisite: one of the following activity courses: Physical Education 1abcd, 2abcd, 4abcd, 5abcd, 7abcd, 101abcd, 102abcd, 204abcd, 224abcd, 225abcd, 240abcd, 241abcd, 245abcd, 251abcd, 253abcd, 256abcd, 280, 285abcd, 300abcd, 302abcd, 350abcd, 400abcd
Recommended Preparation: eligibility for English A or 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.

Physical Education 270
Fitness and Sports Nutrition
3 units; 3 hours lecture
Recommended Preparation: eligibility for English A and Mathematics 23
Credit, degree applicable
Transfer CSU
This course examines nutritional and dietary requirements of actively exercising adults and those engaged in competitive sports. The course emphasizes the study of optimal nutritional regimens for improved fitness and performance, the role of supplements as ergogenic aids, and the integration of diet and exercise in achieving goal body weight and composition.

Physical Education 272
Care and Prevention of Athletic Injuries
3 units; 3 hours lecture
Recommended Preparation: eligibility for English A or 84
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.

Physical Education 274
Clinical Assessment and Management of Athletic Injuries
3 units; 2 hours lecture, 3 hours lab
Prerequisite: Physical Education 272 with a minimum grade of C; valid American Red Cross First Aid and CPR Certificate
Recommended Preparation: eligibility for English A or 84
Credit, degree applicable
Transfer CSU
This course builds on concepts from Physical Education 272, Care and Prevention of Athletic Injuries, and examines advanced techniques in the field of athletic training. Emphasis is placed on recognition, assessment, management, and prevention of athletic injuries including strapping techniques. Students will implement and administer athletic training concepts as they apply to athletics and athletic competition.

Physical Education 275
Sport Psychology
3 units; 3 hours lecture
Recommended Preparation: Psychology 5; eligibility for English 1A
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.

Note: Physical Education 275 is the same course as Psychology 22.

Physical Education 280
Exercise and Nutrition Programs for Fitness and Weight Management
3 units; 2 hours lecture, 2 hours lab
Recommended Preparation: eligibility for English A or 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 by underwater weighing, and tests of muscle function will be conducted in the College’s Exercise Science Laboratory to guide exercise and dietary recommendations.

Physical Education 282abcd
Primary Prevention of Cardiovascular and Related Diseases
2 units; 1 hour lecture, 3 hours lab
Credit, degree applicable
Transfer CSU
This course provides instruction in risk factor identification and modification for cardiovascular related diseases including the metabolic syndrome. Emphasis is placed on healthy lifestyle behaviors including exercise training, proper nutrition, and weight management. Other topics to be discussed include smoking cessation, lipid lowering techniques, and blood pressure reduction strategies. This course is designed for apparently healthy individuals with one or more risk factors for cardiovascular disease such as physical inactivity, obesity, high blood pressure, high cholesterol, cigarette smoking, high blood sugar, and for students who are interested in these health-related topics.
Physical Education 285abcd
Continuing Fitness, Nutrition, and Weight Management Programs
1 unit; 3 hours lab arranged per week
Prerequisite: PE 260 or 280 with a minimum grade of C in prerequisite
Credit, degree applicable
Transfer CSU
This course provides continued guidance in individualized exercise training and basic nutrition with emphasis on further development of physical fitness and weight management. The course includes fitness and nutrition reassessments; individual consultations with the instructor; development of revised exercise prescriptions and dietary and supervised comprehensive exercise training.

Note: Letter grade or P/NP option.

Physical Education 290
Personal Fitness Trainer
3 units; 2 hours lecture, 3 hours lab
Recommended Preparation: English 84 and Mathematics 23 or Mathematics 25
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.

Note: Letter grade or P/NP option.

Physical Education 300abcd
Aerobic Fitness
1 unit; 2 hours lab
Credit, degree applicable
Transfer CSU, UC*
This course focuses on the basic principles of cardiorespiratory conditioning. Emphasis is placed on technique and development of cardiorespiratory endurance, muscle endurance, flexibility, and improved body composition. Assessments of aerobic fitness, muscle endurance, and body composition are used to develop exercise prescriptions.

Physical Education 302abcd
Step Aerobics
1 unit; 2 hours lab
Recommended Preparation: Physical Education 300abcd or equivalent skill level
Credit, degree applicable
Transfer CSU, UC*
This course provides instruction and workout that utilize an adjustable platform and choreographed stepping patterns for the primary purpose of increasing cardiorespiratory fitness. The use of hand weights, elastic bands and tubes, and training circuits will provide variety and further develop overall strength, endurance, and flexibility as well as improve body composition.

Note: Letter grade or P/NP option.

Physical Education 307abcd
Hydroexercise
1 unit; 2 hours lab
Credit, degree applicable
Transfer CSU, UC*
This course is designed to meet the needs of students with disabilities. Exercise programs are personalized and self-paced. Specialized equipment is available to accommodate the needs of the students. Fitness terminology, training principles, and benefits associated with cardiovascular exercise will be discussed.

Note: Letter grade or P/NP option.

Physical Education 308abcd
Adapted Activity Courses
Physical Education 400abcd
Adapted Fitness
1 unit; 3 hours lab
Credit, degree applicable
Transfer CSU, UC*
This course is designed to meet the needs of students with disabilities and provides personalized exercise programs. Exercise programs may incorporate modifications when limitations are associated with a disability. The components of physical fitness will be discussed in order to develop an understanding of training principles, benefits of exercise, and conditioning strategies. Basic nutrition guidelines related to fitness will also be discussed.

Note: Letter grade or P/NP option.
Note: This course is designed for students with disabilities.

Physical Education 401abcd
Adapted Strength Training
1 unit; 3 hours lab
Credit, degree applicable
Transfer CSU, UC*
This course provides strength training exercise for students with disabilities. Exercise programs are personalized and self-paced. Specialized equipment is available to accommodate the needs of the students. Fitness terminology, training principles, and the benefits from resistance exercise will be discussed. Major muscle groups will be identified in their application to specific exercises.

Note: Letter grade or P/NP option.
Note: This course is designed for students with disabilities.

Physical Education 402abcd
Adapted Swimming and Hydroexercise
1 unit; 3 hours lab
Credit, degree applicable
Transfer CSU, UC*
This course is designed to meet the needs of students with disabilities. Students will learn basic swimming skills and/or participate in personalized hydroexercise programs. Water safety skills, elements of physical fitness, and training principles in the water utilizing buoyancy and hydrodynamic resistance will be included.

Note: Letter grade or P/NP option.
Note: This course is designed for students with disabilities.

Physical Education 404abcd
Adapted Cardiovascular Fitness
1 unit; 3 hours lab
Credit, degree applicable
Transfer CSU, UC*
This course provides cardiovascular exercise for students with disabilities. Exercise programs are personalized and self-paced. Specialized equipment is available to accommodate the needs of the students. Fitness terminology, training principles, and benefits associated with cardiovascular exercise will be discussed.

Note: Letter grade or P/NP option.
Note: This course is designed for students with disabilities.

Physical Education 407abcd
Adapted Bowling
1 unit; 3 hours lab
Credit, degree applicable
Transfer CSU, UC*
This course is designed for students with disabilities. Students will receive instruction in the basic skills, rules, etiquette, scoring and playing strategies in the activity of bowling. Students will also participate in a tournament and league play during the semester.

Note: Letter grade or P/NP option.
Note: This course is designed for students with disabilities.

Note: Students must obtain their own transportation to and from Gable House Bowl and must pay a fee per line of bowling, which includes rental of shoes and bowling ball.

*Some UC transferable courses have credit limitations.
For details, see a counselor, the Transfer Center advisor, or the articulation officer.
Physical Education 409abcd  
Adapted Yoga  
1 unit; 3 hours lab  
Credit, degree applicable  
Transfer CSU, UC  
This course is designed for students with disabilities. Emphasis is placed on personalized programs to meet each student’s abilities. Improvements in core strength, flexibility, balance, relaxation, and stress reduction through mind and body integration will be stressed. Yoga postures (asanas) will be introduced and modified when necessary. Breathing patterns while performing the asanas will be emphasized. This course will give the student the knowledge and practice to move toward improved health and greater mind and body awareness.  
Note: Letter grade or P/NP option.

Physical Education Intercollegiate Athletic Courses

Physical Education 5abc  
Men’s Intercollegiate Baseball Team  
3 units; 10 hours lab  
Enrollment Limitation: tryout (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 offered in the spring semester only.

Physical Education 6abc  
Off-Season Training for Men’s Intercollegiate Baseball Team  
1 unit; 2 hours lab  
Enrollment Limitation: tryout (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, skill development, strength training, and conditioning.  
Note: This course is offered in the fall semester and summer session only.

Physical Education 15abc  
Men’s Intercollegiate Basketball Team  
3 units; 10 hours lab  
Enrollment Limitation: tryout (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. Students will compete against conference schools and other colleges.  
Note: This course is offered in the fall semester only.

Physical Education 16abc  
Off-Season Training for Men’s Intercollegiate Basketball Team  
1 unit; 2 hours lab  
Enrollment Limitation: tryout (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 offered in the spring semester and summer session only.

Physical Education 20abc  
Women’s Intercollegiate Cross Country Team  
3 units; 10 hours lab  
Enrollment Limitation: tryout (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 cross-country training and the opportunity for intercollegiate competition. Students will compete against conference schools and other colleges.  
Note: This course is offered in the fall semester only.

Physical Education 21abc  
Off-Season Training for Women’s Intercollegiate Cross Country Team  
1 unit; 2 hours lab  
Enrollment Limitation: tryout (high school varsity experience or equivalent skill)  
Credit, degree applicable  
Transfer CSU, UC  
This course provides instruction and practice in the advanced techniques of cross country. All students will engage in an off-season program emphasizing instruction, skill development, strength training, and conditioning.  
Note: This course is offered in the spring semester and summer session only.

Physical Education 25abc  
Men’s Intercollegiate Cross Country Team  
3 units; 10 hours lab  
Enrollment Limitation: tryout (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 cross-country training and the opportunity for intercollegiate competition. Students will compete against conference schools and other colleges.  
Note: This course is offered in the fall semester only.

Physical Education 26abc  
Off-Season Training for Men’s Intercollegiate Cross Country Team  
1 unit; 2 hours lab  
Enrollment Limitation: tryout (high school varsity experience or equivalent skill)  
Credit, degree applicable  
Transfer CSU, UC  
This course provides instruction and practice in the advanced techniques of cross country. All students will engage in an off-season program emphasizing instruction, skill development, strength training, and conditioning.  
Note: This course is offered in the spring semester and summer session only.

*Some UC transferable courses have credit limitations.  
For details, see a counselor, the Transfer Center advisor, or the articulation officer.

The hours per week of courses may be adjusted based on the length of the term.
Physical Education 35abc
Men's Intercollegiate Football Team
3 units; 10 hours lab
Enrollment Limitation: tryout (high school varsity experience or equivalent skill)
Credit, degree applicable
Transfer CSU, UC*

This course provides instruction and practice in the advanced techniques of football and the opportunity for intercollegiate competition. Students will compete against conference schools and other colleges.

Note: This course is offered in the fall semester only.

Physical Education 36abc
Off-Season Training for Men's Intercollegiate Football Team
1 unit; 2 hours lab
Enrollment Limitation: tryout (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 offered in the spring semester and summer session only.

Physical Education 45abc
Men's Intercollegiate Golf Team
3 units; 10 hours lab
Enrollment Limitation: tryout (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. Students will compete against conference schools and other colleges.

Note: This course is offered in the spring semester only.

Physical Education 46abc
Off-Season Training for Men's Intercollegiate Golf Team
1 unit; 2 hours lab
Enrollment Limitation: tryout (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 offered in the fall semester and summer session only.

Physical Education 57abc
Men's Intercollegiate Swimming Team
3 units; 10 hours lab
Enrollment Limitation: tryout (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 offered in the spring semester only.

Physical Education 58abc
Off-Season Training for Men's Intercollegiate Swimming Team
1 unit; 2 hours lab
Enrollment Limitation: tryout (high school varsity experience or equivalent skill)
Credit, degree applicable
Transfer CSU, UC*

This course provides students conditioning specific to competitive swim training. Students will engage in skill development and swim conditioning as well as resistance training specific to swimming.

Note: This course is offered in the fall semester and summer session only.

Physical Education 60abc
Women's Intercollegiate Soccer Team
3 units; 10 hours lab
Enrollment Limitation: tryout (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. Students will compete against conference schools and other colleges.

Note: This course is offered in the fall semester only.

Physical Education 61abc
Off-Season Training for Women's Intercollegiate Soccer Team
1 unit; 2 hours lab
Enrollment Limitation: tryout (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 offered in the spring semester and summer session only.

Physical Education 65abc
Men's Intercollegiate Tennis Team
3 units; 10 hours lab
Enrollment Limitation: tryout (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. Students will compete against conference schools and other colleges.

Note: This course is offered in the spring semester only.

Physical Education 66abc
Off-Season Training for Men's Intercollegiate Tennis Team
1 unit; 2 hours lab
Enrollment Limitation: tryout (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 offered in the fall semester and summer session only.

Physical Education 70abc
Men's Intercollegiate Soccer Team
3 units; 10 hours lab
Enrollment Limitation: tryout (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 offered in the fall semester only.

Physical Education 71abc
Off-Season Training for Men's Intercollegiate Soccer Team
1 unit; 2 hours lab
Enrollment Limitation: tryout (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 offered in the spring semester and summer session only.

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### Physical Education 75abc
**Men’s Intercollegiate Track and Field Team**
- 3 units; 10 hours lab
- Enrollment Limitation: tryout (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 offered in the spring semester only.*

### Physical Education 76abc
**Off-Season Training for Men’s Intercollegiate Track and Field Team**
- 1 unit; 2 hours lab
- Enrollment Limitation: tryout (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 offered in the fall semester and summer session only.*

### Physical Education 80abc
**Men’s Intercollegiate Volleyball Team**
- 3 units; 10 hours lab
- Enrollment Limitation: tryout (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 offered in the spring semester only.*

### Physical Education 81abc
**Off-Season Training for Men’s Intercollegiate Volleyball Team**
- 1 unit; 2 hours lab
- Enrollment Limitation: tryout (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 offered in the fall semester and summer session only.*

### Physical Education 85abc
**Men’s Intercollegiate Water Polo Team**
- 3 units; 10 hours lab
- Enrollment Limitation: tryout (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. Students will compete against conference schools and other colleges.

*Note: This course is offered in the fall semester only.*

### Physical Education 86abc
**Off-Season Training for Men’s Intercollegiate Water Polo Team**
- 1 unit; 2 hours lab
- Enrollment Limitation: tryout (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: This course is offered in the spring semester and summer session only.*

### Physical Education 87abc
**Women’s Intercollegiate Water Polo Team**
- 3 units; 10 hours lab
- Enrollment Limitation: tryout (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. Training will culminate in competition against teams from other institutions as a test of skill levels both as an individual and as a group.

*Note: This course is offered in the fall semester only.*

### Physical Education 105abc
**Women’s Intercollegiate Basketball Team**
- 3 units; 10 hours lab
- Enrollment Limitation: tryout (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. Students will compete against conference schools and other colleges.

*Note: This course is offered in the fall semester only.*

### Physical Education 106abc
**Off-Season Training for Women’s Intercollegiate Basketball Team**
- 1 unit; 2 hours lab
- Enrollment Limitation: tryout (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 offered in the spring semester and summer session only.*

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*Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center advisor, or the articulation officer.*

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Physical Education 110abc
Women's Intercollegiate Volleyball Team
3 units; 10 hours lab
Enrollment Limitation: tryout (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 offered in the spring semester only.

Physical Education 115abc
Women's Intercollegiate Tennis Team
3 units; 10 hours lab
Enrollment Limitation: tryout (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 offered in the fall semester and summer session only.

Physical Education 116abc
Off-Season Training for Women's Intercollegiate Tennis Team
1 unit; 2 hours lab
Enrollment Limitation: tryout (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 offered in the fall semester and summer session only.

Physical Education 120abc
Women's Intercollegiate Softball Team
3 units; 10 hours lab
Enrollment Limitation: tryout (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 offered in the spring semester only.

Physical Education 121abc
Off-Season Training for Women's Intercollegiate Softball Team
1 unit; 2 hours lab
Enrollment Limitation: tryout (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 instruction, game tactics, skill development, strength training, and conditioning.
Note: This course is offered in the fall semester and summer session only.

Physical Education 125abc
Women's Intercollegiate Swimming Team
3 units; 10 hours lab
Enrollment Limitation: tryout (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 swimming and the opportunity for intercollegiate competition. Students will compete against conference schools and other colleges.
Note: This course is offered in the spring semester only.

Physical Education 126abc
Off-Season Training for Women's Intercollegiate Swimming Team
1 unit; 2 hours lab
Enrollment Limitation: tryout (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 as well as resistance training specific to swimming.
Note: This course is offered in the fall semester and summer session only.

Physical Education 130abc
Women's Intercollegiate Track and Field Team
3 units; 10 hours lab
Enrollment Limitation: tryout (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. All students will engage in an off-season program emphasizing instruction, skill development, strength training, and conditioning.
Note: This course is offered in the spring semester only.

Physical Education 131abc
Off-Season Training for Women’s Intercollegiate Track and Field Team
1 unit; 2 hours lab
Enrollment Limitation: tryout (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 offered in the fall semester and summer session only.

Physical Education 132abc
Women's Intercollegiate Badminton Team
3 units; 10 hours lab
Enrollment Limitation: tryout (high school varsity experience or equivalent skill)
Credit, degree applicable
Transfer CSU, UC
This course provides instruction and practice in the advanced techniques of badminton leading to intercollegiate competition with member schools of the South Coast Conference and other colleges. Athletes who satisfactorily fulfill the course requirements will earn an El Camino College Award of Completion.
Note: This course is offered in the spring semester only.

The hours per week of courses may be adjusted based on the length of the term.
Physical Science – A.S. Degree
(Natural Sciences Division)

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.

El Camino College Major Requirements
One of the following two-semester sequences: Chemistry 1A-1B, Physics 1A-1B, Physics 1A-1C, Physics 2A-2B, Physics 3A-3B; an additional 10-13 units from the following courses to reach a total of 20 units: Astronomy 12, 20, 25, Chemistry 4, 7A, 7B, Computer Science 1, 10, Geology 1, 2, 3, 4, 15, Mathematics 150, 180, 190, 191, 220, 270, Physics 1C, 1D
Total Units: 20

Physical Education 133abc
Off-Season Training for Women’s Intercollegiate Badminton Team
1 unit; 3 hours lab
Enrollment Limitation: tryout [high school varsity or equivalent skill]
Credit, degree applicable
Transfer CSU
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 offered in the fall semester only.

Physical Education 233abc
Pep Squad
2 units; 4 hours lab
Enrollment Limitation: tryout
Credit, degree applicable
Transfer CSU, UC
This course is designed for cheerleaders who are able to perform cheers, dance and stunting at an intermediate level. Athletes are selected at tryouts and perform at football and basketball games, and selected community activities.
Note: This course is offered fall semester only. Tryouts are held in the spring.

Physical Education 234abcd
Off-Season Training for Pep Squad
1 unit; 2 hours lab
Credit, degree applicable
Transfer CSU, UC
This course is designed as off-season training for returning members of the cheerleading squad. This course is a requirement for cheerleaders participating in the competition squad. Students will work on skill development in cheer, dance and stunting. Strength training and cardiovascular conditioning will also be implemented.

Physical Science

Physical Science 25
Exploring Physical Sciences
3 units; 2 hour lecture, 4 hours lab
Recommended Preparation: eligibility for English 84
Credit, degree applicable
Transfer CSU, UC*
The course provides a step-by-step introduction to the physical sciences through the study of simple physical systems. Topics include energy, forces, elasticity, magnetism, electricity, gravitational interactions, changes of state, physical properties, and chemical changes. Drawing from their own observations, students will develop concepts and construct models that can predict outcomes of experiments. Physical Science 25 is designed for students preparing to teach at the elementary and middle school levels.
* Note: Students will not receive UC credit for Physical Science 25 if taken after a college level chemistry or physics course.

Physical Science 50
Special Topics in Physical Science
Units determined by individual course; lecture/lab hours determined by individual course
Credit status determined by individual course
This course is designed to explore topics in Physical Science more specific than those provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

History of Science 11
Introduction to the History of Western Science
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 1A
Credit, degree applicable
Transfer CSU, UC
In this course the major ideas and organizing theories of the scientific revolutions in astronomy, physics, chemistry, biology, and geology are introduced. The professional and personal lives of the scientists responsible for each revolution are discussed. Scientists covered include Galileo Galilei, Isaac Newton, Albert Einstein, and Charles Darwin. A brief introduction to the methods, philosophy, and content of science is also included and an example of a contemporary scientific revolution is also discussed.
Note: This course is primarily for the non-science major. No mathematics or previous science background is required.

Physics

Physics 1A
Mechanics of Solids
4 units; 4 hours lecture, 2 hours lab
Prerequisite: Physics 11 and 13, or Physics 2A with a minimum grade of C in prerequisite or one year of high school physics; Mathematics 190 with a minimum grade of C or concurrent enrollment
Credit, degree applicable
Transfer CSU, UC*
This course surveys the mathematical and physical descriptions of vectors, equilibrium, linear kinematics, Newton’s Laws, energy, power, angular motion, linear and angular momentum, rotational dynamics, elasticity, simple harmonic motion and gravitation.
*Note: The maximum UC credit allowed for students completing Physics 1A, 1B, 1C, 1D and Physics 2A, 2B and/or Physics 3A, 3B is one series.

*Some UC transferable courses have credit limitations.
For details, see a counselor, the Transfer Center advisor, or the articulation officer.
Physics – A.S. Degree

(Natural Sciences Division)

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 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.

Physics 1B

Fluids, Heat and Sound

3 units; 3 hours lecture, 2 hours lab
Prerequisite: Physics 1A with a minimum grade of C; Mathematics 191 with a minimum grade of C or concurrent enrollment
Credit, degree applicable
Transfer CSU, UC*

The course is a calculus-based course which covers principles of hydrostatics, Bernoulli’s Principle, viscous forces, thermometry, calorimetry, heat transfer, basic processes, Carnot cycle, First and Second Laws of Thermodynamics, entropy, kinetic theory, sound and wave motion, resonance in strings and tubes, Doppler effect, and acoustics.

*Note: The maximum UC credit allowed for students completing Physics 1A, 1B, 1C, 1D and Physics 2A, 2B and/or Physics 3A, 3B is one series.

Physics 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 Physics 1A, 1B, 1C, 1D and Physics 2A, 2B and/or Physics 3A, 3B is one series.

Physics 1D

Optics and Modern Physics

3 units; 3 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 is a calculus-based course which covers geometric optics, including reflection and refraction at plane and spherical surfaces, prisms, lenses, mirrors, and simple optical instruments, and physical optics, including polarization, interference, diffraction, and introductory electromagnetic wave theory. The modern physics portion of this course covers special relativity, the particle nature of light, wave properties of particles, the Schrödinger equation, atomic physics and spectra, and nuclear physics.

Note: This course is offered in the spring semester only.

*Note: The maximum UC credit allowed for students completing Physics 1A, 1B, 1C, 1D and Physics 2A, 2B and/or Physics 3A, 3B is one series.

Physics 2A

General Physics

4 units; 3 hours lecture, 3 hours lab
Prerequisite: Mathematics 170 with a minimum grade of C or equivalent
Credit, degree applicable
Transfer CSU, UC*

The course is a survey of 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, 2B and Physics 1A, 1B, 1C, 1D and/or Physics 3A, 3B is one series.

Physics 2B

General Physics

4 units; 3 hours lecture, 3 hours lab
Prerequisite: Physics 2A with a minimum grade of C
Credit, degree applicable
Transfer CSU, UC*

This course is a survey of electric force, electric field, electric energy, electric circuits, electromagnetism, applied electricity, 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 Physics 2A, 2B and Physics 1A, 1B, 1C, 1D and/or Physics 3A, 3B is one series.

The hours per week of courses may be adjusted based on the length of the term.
Physics 3A  
*General Physics with Calculus*

5 units; 4 hours lecture, 3 hours lab  
Prerequisite: Mathematics 160 or Mathematics 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 and vibration, wave motion and 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, 3B and Physics 1A, 1B, 1C, 1D and/or Physics 2A, 2B is one series.

Physics 3B  
*General Physics with Calculus*

5 units; 4 hours lecture, 3 hours lab  
Prerequisite: Physics 3A with a minimum grade of C  
Credit, degree applicable  
Transfer CSU, UC*  

This course is a calculus-based survey of electricity, magnetism, dynamics, statics, 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 Physics 3A, 3B and Physics 1A, 1B, 1C, 1D and/or Physics 2A, 2B is one series.

Physics 11  
*Descriptive Introduction to Physics*

3 units; 3 hours lecture  
Recommended Preparation: eligibility for English 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 Physics 1A or Physics 2A.

Physics 12  
*Laboratory for Introductory Physics*

1 unit; 3 hours lab  
Prerequisite: Physics 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 Physics 11.  
*Note: Students will not receive UC credit for Physics 12 if taken after Physics 1A or Physics 2A.

Physics 13  
*Quantitative Aspects of Elementary Physics*

1 unit; 1 hour lecture, 1 hour lab  
Prerequisite: Physics 11 with a minimum grade of C or concurrent enrollment (a student who has completed one year of high school physics meets the prerequisite of Physics 11; eligibility for Mathematics 180  
Credit, degree applicable  
Transfer CSU, UC*  

This course covers elementary problem-solving techniques and is designed to prepare students for Physics 1A, Mechanics of Solids. The topics include: vector resolution, the free-body diagram, statics (including torque), translational and rational kinematics, translational and rational dynamics, energy and momentum, pressure and buoyancy.  
*Note: Students will not receive UC credit for Physics 13 if taken after Physics 1A or Physics 2A.

Physics 99abc  
*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, UC - limitations apply  

This course provides the student an opportunity to explore research problems in physics not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with 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 Anatomy 30, Anatomy 32, and Physiology 31 is two courses.

**Physics**

**Physiology**

Physiology 31  
*Human Physiology*

4 units; 2 hours lecture, 6 hours lab  
Prerequisite: Anatomy 30 or 32 and Chemistry 20, 21A or 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 Anatomy 30, Anatomy 32, and Physiology 31 is two courses.

**Political Science**

Political Science 1  
*Governments of the United States and California*

3 units; 3 hours lecture  
Recommended Preparation: eligibility for English 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.

Political Science 2  
*Introduction to Comparative Politics*

3 units; 3 hours lecture  
Recommended Preparation: Political Science 1 and eligibility for English 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.
Political Science – A. A. Degree

[Behavioral and Social Sciences Division]

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.

El Camino College Major Requirements
Political Science 1; four courses from: Political Science 2, 3, 5, 6, 8, 10; one course from: Economics 1, 2, History 101, 102, 141, Philosophy 3, 10
Total Units: 18

Preparation for the 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.

Political Science 3
**Introduction to Principles and Methods of Political Science**
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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.

Political Science 5
**Ethnicity in the American Political Process**
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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 government will be examined. Emphasis will be placed on problems of assimilation and integration into the American political system.

Political Science 6
**Civil Rights and Liberties in the United States**
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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 will be placed on First Amendment protections, rights of the defendant, and problems of minority groups facing discrimination.

Political Science 8
**California State and Local Government and Intergovernmental Issues**
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 1A
Credit, degree applicable
Transfer CSU
In this course the organization and operation of California’s state and local (county, city, special district) governments, as well as intergovernmental issues, will be examined. Topics will include urban problems, regional politics, and intergovernmental relations. California’s interrelationships with local and national institutions and policies will be analyzed.

Political Science 10
**Introduction to International Relations**
3 units; 3 hours lecture
Recommended Preparation: Political Science 1; eligibility for English 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.

Political Science 50
**Special Topics in Political Science**
Units determined by individual course; lecture/lab hours determined by individual course
Credit status determined by individual course
This course is designed to explore topics in Political Science more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

Political Science 99abc
**Independent Study**
1-3 units; hours to be arranged
Enrollment Limitation: two courses in Political Science with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work
Credit, degree applicable
Transfer CSU, UC - limitations apply
This course provides advanced studies in a subject field of Political Science not covered in the regular departmental offerings. Regular conferences will be held with the instructor to discuss and coordinate the assigned projects [60 hours per unit]. Note: Refer to page 11 of this Catalog for eligibility requirements.

*Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center advisor, or the articulation officer.
Pre-Dentistry – A.S. Degree
[Natural Sciences Division]

The pre-professional program of dentistry provides a degree option for those students planning to enter the field. This program is designed to provide students with the necessary scientific foundation for future studies whether or not they choose to pursue a bachelor’s degree in a science major. Through a series of core courses in biology, chemistry, mathematics, physics, and English, the student will acquire the ability to apply fundamental theories and principles to explain observed phenomena in life and physical sciences. Laboratories are designed to complement the lecture material and allow the student to apply the principles of the scientific method. Competencies will be assessed by examining student abilities to apply the mathematical concepts to physics and chemistry problem solving, to utilize knowledge of atomic and molecular structure to explain biological processes, and to write coherent reports of observed phenomena.

Preparation for the 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 – A.S. Degree
[Mathematical Sciences Division]

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 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-Medicine – A.S. Degree
[Natural Sciences Division]

The pre-professional program of medicine provides a degree option for those students planning to enter the field. This program is designed to provide students with the necessary scientific foundation for future studies whether or not they choose to pursue a bachelor’s degree in a science major. Through a series of core courses in biology, chemistry, mathematics, physics, and English, the student will acquire the ability to apply fundamental theories and principles to explain observed phenomena in life and physical sciences. Laboratories are designed to complement the lecture material and allow the student to apply the principles of the scientific method. Competencies will be assessed by examining student abilities to apply the mathematical concepts to physics and chemistry problem solving, to utilize knowledge of atomic and molecular structure to explain biological processes, and to write coherent reports of observed phenomena.

Preparation for the 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 – A.S. Degree

(Health Sciences and Athletics Division)

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 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-Optometry – A.S. Degree

(Natural Sciences Division)

The pre-professional program of optometry provides a degree option for those students planning to enter the field. This program is designed to provide students with the necessary scientific foundation for future studies whether or not they choose to pursue a bachelor’s degree in a science major. Through a series of core courses in biology, chemistry, mathematics, physics, and English, the student will acquire the ability to apply fundamental theories and principles to explain observed phenomena in life and physical sciences. Laboratories are designed to complement the lecture material and allow the student to apply the principles of the scientific method. Competencies will be assessed by examining student abilities to apply the mathematical concepts to physics and chemistry problem solving, to utilize knowledge of atomic and molecular structure to explain biological processes, and to write coherent reports of observed phenomena.

Preparation for the 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-Pharmacy – A.S. Degree

(Natural Sciences Division)

The pre-professional program of pharmacy provides a degree option for those students planning to enter the field. This program is designed to provide students with the necessary scientific foundation for future studies whether or not they choose to pursue a bachelor’s degree in a science major. Through a series of core courses in biology, chemistry, mathematics, physics, and English, the student will acquire the ability to apply fundamental theories and principles to explain observed phenomena in life and physical sciences. Laboratories are designed to complement the lecture material and allow the student to apply the principles of the scientific method. Competencies will be assessed by examining student abilities to apply the mathematical concepts to physics and chemistry problem solving, to utilize knowledge of atomic and molecular structure to explain biological processes, and to write coherent reports of observed phenomena.

Preparation for the 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.
Psychology – A.A. Degree

This degree 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.

El Camino College Major Requirements

Psychology 5, 7, 9A, 9B; two courses from: Psychology 2, 3, 8, 10, 12, 15, 16, 21, 22
Total Units: 20

Preparation for the 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.

Psychology 2

Psychology for Effective Living
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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.

Psychology 3

Critical Thinking and Psychology
3 units; 3 hours lecture
Prerequisite: English 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.

Psychology 5

General Psychology
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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.

Psychology 7

Physiological Psychology
3 units; 3 hours lecture
Prerequisite: Psychology 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.

Psychology 8

Social Psychology
3 units; 3 hours lecture
Prerequisite: Psychology 5 with a minimum grade of C
Recommended Preparation: eligibility for English 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.

Psychology 9A

Introduction to Elementary Statistical Methods for the Study of Behavior
4 units; 3 hours lecture, 3 hours lab
Prerequisite: Psychology 5 or Sociology 101 and Mathematics 80 with a minimum grade of C in prerequisite
Credit, degree applicable
Transfer CSU, UC*
This is a course in statistical methods and research design for the behavioral sciences. The course focuses on descriptive and inferential statistical techniques for summarizing research data and for making conclusions about the populations they represent. Students are introduced to the basic challenges and skills involved in successful undergraduate and graduate training in the behavioral sciences, including both reviewing and writing scientific research reports.

Note: Psychology 9A is the same course as Sociology 109.

*Note: The maximum UC credit allowed for students completing Psychology 9A and Sociology 109 or Psychology 9A and Mathematics 150 is one course.

*Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center advisor, or the articulation officer.
Psychology 9B  
**Experimental Methods in the Study of Behavior**  
4 units; 3 hours lecture, 3 hours lab  
**Prerequisite:** Psychology 9A or Sociology 109 with a minimum grade of C in prerequisite.  
Credit, degree applicable  
Transfer CSU, UC  

This course continues the study of statistical methods and research design for the behavioral sciences. This course focuses on the application of the philosophy of science in general and the scientific method in particular. Students learn to design and conduct research, analyze data using descriptive and inferential statistics, and report results in the format of the American Psychological Association. Students are introduced to the basic challenges and skills involved in actively participating on a research team while conducting their own independent research projects.  

**Note:** This course is only offered in the spring semester.

Psychology 10  
**African American Psychology**  
3 units; 3 hours lecture  
**Recommended Preparation:** eligibility for English 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.

Psychology 12  
**Human Sexuality**  
3 units; 3 hours lecture  
**Prerequisite:** Psychology 5 with a minimum grade of C  
**Recommended Preparation:** eligibility for English 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.

Psychology 15  
**Abnormal Psychology**  
3 units; 3 hours lecture  
**Prerequisite:** Psychology 5 with a minimum grade of C  
**Recommended Preparation:** eligibility for English 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.

Psychology 16  
**Lifespan Development**  
3 units; 3 hours lecture  
**Prerequisite:** Psychology 5 with a minimum grade of C  
**Recommended Preparation:** eligibility for English 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.  

**Note:** This course does not meet the requirements of the El Camino College Nursing Program.

Psychology 21  
**Introduction to the Psychology of Consciousness**  
3 units; 3 hours lecture  
**Recommended Preparation:** Psychology 5; eligibility for English 1A  
Credit, degree applicable  
Transfer CSU, UC  

This course focuses on the scientific investigation of consciousness. This includes, but is not limited to, the areas of dream analysis, meditation, near death experiences, extrasensory perception (ESP), altered states and brain functions. Current research, theories, methods, and historical overview will be considered. In addition, other approaches to developing the mind from Eastern cultures such as Yoga, Zen Buddhism, and contemporary Sufism will be examined.

Psychology 22  
**Sport Psychology**  
3 units; 3 hours lecture  
**Recommended Preparation:** Psychology 5; eligibility for English 1A  
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.  

**Note:** Psychology 22 is the same course as Physical Education 275.

Psychology 50  
**Special Topics in Psychology**  
Units determined by individual course; lecture/lab hours determined by individual course  
Credit status determined by individual course  

This course is designed to explore topics in Psychology more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

Psychology 96abcd  
**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 - limitations apply  

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Psychology 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 CWEE may not exceed 16 units.
Radiologic Technology – A.S. Degree and Certificate of Accomplishment

(Health Sciences and Athletics Division)

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 more information about the Radiologic Technology program, please visit our website at www.elcamino.edu/academics/health-sciences/radiologictech.

Program Length and Licensing Requirements
The Associate Degree Radiologic Technologist Program is twenty-five months in length, after the completion of the program prerequisite classes. The twenty-five months includes the academic semesters and clinical training [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 [CDPHS-RHB], and the Joint Review Committee on Education in Radiologic Technology [JRCERT].

Program Prerequisites
- High school graduate with at least a C average or GED equivalent
- Complete the following courses: Anatomy 32, Computer Information Systems 13, English 1A, Mathematics 40 or 43, Physiology 31, Psychology 5, Radiologic Technology A. A minimum grade of C must be earned in each course.
- Grade point average of 2.25 or better

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. A Program Application and transcripts of all academic work completed [high school and college], must be filed in the Office of the Program Director, by appointment, after the completion of the three program prerequisite courses listed above [Anatomy 32, Physiology 31 and Radiologic Technology A.]

If the number of eligible applicants exceeds the class size limit, a waiting list will be established. An applicant on the waiting list must reaffirm interest in enrolling in the next class by submitting a letter of intent to the Program Director. This letter of intention will be mailed by the Program Director to each applicant on the waiting list and must be returned to the Program Director by the date specified on the letter (usually the end of May). Students will not automatically remain on the waiting list. It is the student’s responsibility to inform the Program Director in writing of any changes to their application information.

Prior to Starting the Program
Students will be required to attend a mandatory orientation session during the summer, before beginning the program in the fall semester. 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, and a criminal background check clearance as required by the Joint Commission on Accreditation of Health Care Organizations [JCAHO] prior to placement at a clinical education training facility. The student is responsible for the cost of these requirements.

Fees
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.

[Continued on next page]
El Camino College Major Requirements
Radiologic Technology 91, 93, 106, 107, 108, 111, 123, 124, 217, 218, 233, 244, 255; Medical Terminology 1
Total Units: 58

Students must complete Radiologic Technology 217, 218, 233, 244 and 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.

Certificate of Accomplishment
To be eligible for the Certificate of Accomplishment, the student must have an Associate in Science Degree in Radiologic Technology. Required Certificate Courses: Radiologic Technology 219, 328
Total Units: 10.5

Radiologic Technology 217, 218, 219, 233, 244, 255 and 328 must be completed at El Camino College. Students who compete all Radiologic Technology Associate in Science Degree and Certificate of Accomplishment requirements are eligible for certification by the American Registry of Radiologic Technologists (ARRT).

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 before the student may return. The student may be asked to repeat courses previously passed within the program for successful continuation in the program.

Advanced Standing
The student with prior training or experience may petition for credit by examination for Radiologic Technology 111 and 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 minimal-ly 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.

Radiologic Technology 50
Special Topics in Radiologic Technology
Units determined by individual course; lecture/lab hours determined by individual course
Credit status determined by individual course
This course is designed to explore topics in Radiologic Technology more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

Radiologic Technology 91
Radiographic Pathology
2 units; 1 hour 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.

Radiologic Technology 93
Venipuncture and Pharmacology for the Radiologic Technologist
1 unit; 0.5 hour lecture, 1.5 hours lab
Prerequisite: Radiologic Technology 108 and 124 with a minimum grade of C in prerequisite or equivalent
Corequisite: Radiologic Technology 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.

*Some UC transferable courses have credit limitations.
For details, see a counselor, the Transfer Center advisor, or the articulation officer.

The hours per week of courses may be adjusted based on the length of the term.
Radiologic Technology 107
Clinical Experience 2
7 units; 21 hours lab 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 Cardiac Pulmonary Resuscitation (CPR) certification by the American Heart Association or American Red Cross [Health Care Provider/Professional Rescuer] at the first class meeting.

Radiologic Technology 108
Clinical Experience 3
5 units; 35 hours lab to be arranged
(8 weeks course)
Prerequisite: Radiologic Technology 107 and 124 with a minimum grade of C in prerequisite
Credit, degree applicable
Transfer CSU
This course provides continued development of clinical skills in the art of radiography. Areas of skill development include the upper and lower extremities, vertebral column, and thoracic cavity. Emphasis will be placed on advanced contrast examinations and radiation protection of the patient, self, and co-workers, especially in the fluoroscopy examinations.

Radiologic Technology 111
Fundamentals of Radiologic Technology
4 units; 3 hours lecture, 3 hours lab
Corequisite: Radiologic Technology 106 and Radiologic Technology 123
Enrollment Limitation: admission to the Radiologic Technology Program
Credit, degree applicable
Transfer CSU
This course is designed to prepare the radiography student with entry level skills and knowledge to perform safely in a radiology department. Topics covered are imaging receptors for screen/film, computed and direct-digital radiography, patient care, radiation safety, x-ray production and interaction with matter, radiographic quality and technique, operation of radiographic equipment, image delivery, display, archiving and retrieval. Laboratory experiments are performed to compliment the didactic instruction.

Radiologic Technology 123
Radiographic Positioning 1A
4 units; 3 hours lecture, 3 hours lab
Corequisite: Radiologic Technology 106 and 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, thorax, abdomen, upper and lower extremities, shoulder and pelvic girdle 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.

Radiologic Technology 124
Radiographic Positioning 1B
4 units; 3 hours lecture, 3 hours lab
Prerequisite: Radiologic Technology 106, 111, and 123 with a minimum grade of C in prerequisite
Corequisite: Radiologic Technology 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 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, film analysis, and topographical anatomy are presented as they apply in the production of optimum radiographic examinations.

Radiologic Technology 217
Clinical Experience 4
7 units; 21 hours lab to be arranged
Prerequisite: Radiologic Technology 108 with a minimum grade of C
Corequisite: enrollment in Radiologic Technology 233 and 244
Credit, degree applicable
Transfer CSU
This course continues development of clinical skills in the art of radiography with special emphasis on craniography, 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.

Radiologic Technology 218
Clinical Experience 5
7 units; 21 hours lab to be arranged
Prerequisite: Radiologic Technology 217 and 233 with a minimum grade of C in prerequisite
Corequisite: enrollment in Radiologic Technology 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.
Radiologic Technology 219
Clinical Experience 6
6 units; 40.5 hours lab to be arranged (8 week course)
Prerequisite: Radiologic Technology 218 and 255 with a minimum grade of C in prerequisite
Credit, degree applicable
Transfer CSU
This course continues the development of clinical skills in the art of radiography, 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 perform independently, with appropriate supervision to assess their skills for employability. The course emphasizes completions of all mandatory, elective and final clinical performance evaluations.

Radiologic Technology 233
Radiographic Positioning 2
3 units; 2 hours lecture, 3 hours lab
Prerequisite: Radiologic Technology 108 and 124 with a minimum grade of C in prerequisite
Corequisite: Radiologic Technology 217 and 244
Credit, degree applicable
Transfer CSU
This course shall continue with additional principles of radiographic positioning. Emphasis is placed on those procedures involving the cranium. Radiographic technique, anatomy, specialized equipment, patient safety, and radiation protection will be included. Special imaging techniques of the cranium, including cerebral angiography and neuropathology will also be covered.

Radiologic Technology 244
Radiation Physics, Equipment, and Safety
4 units; 4 hours lecture
Prerequisite: Radiologic Technology 124 with a minimum grade of C
Corequisite: Radiologic Technology 217 and 233
Credit, degree applicable
Transfer CSU
This course introduces fundamentals of radiation and radiological physics. Additional subjects covered are: the operation of medical x-ray units, the effects of radiation in humans, the principles of radiation protection as applied in medical radiography, an introduction to health physics instrumentation and radiation control regulations, and the production of radiation by fluoroscopic units with an emphasis on radiation health and safety. Principles of digital imaging will also be discussed.

Radiologic Technology 255
Advanced Imaging and Special Procedures
4 units; 4 hours lecture
Prerequisite: Radiologic Technology 233, 244 and 217 with a minimum grade of C in prerequisite
Corequisite: enrollment in Radiologic Technology 218
Credit, degree applicable
Transfer CSU
This course is designed for the advanced radiography student. Emphasis is on anatomy, pathology, positioning and patient care for specialized radiographic procedures and newer imaging modalities. An in-depth exploration of digital imaging with review of fluoroscopy and radiation safety principles are also covered.

Radiologic Technology 328
Clinical Experience 7
4.5 units; 3 hours lecture, 32 hours lab to be arranged (6 weeks course)
Prerequisite: Radiologic Technology 219 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.

Real Estate

Real Estate 11
Real Estate Principles
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 84
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 Department of Real Estate (DRE) license, with emphasis placed on advertising, listings, finance, appraisal, escrow and the tax aspects of real property ownership.

Real Estate 12A
Legal Aspects of Real Estate
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 84
Credit, degree applicable
Transfer CSU
This course provides instruction on 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.

Real Estate - Page 213
Real Estate – A.A. Degree and Certificates of Achievement
(Business Division)

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 Department of Real Estate (DRE) salesperson and broker license exams as well as the Office of Real Estate Appraisal (OREA) license exam. Courses are approved by the DRE and OREA for basic and continuing education, including computer applications and Uniform Standards of Professional Appraisal Practice (USPAP). Competencies are assessed using projects and exams.

El Camino College Major Requirements
Real Estate 11, 14A, 40 and one of the following options:
Real Estate Option: Real Estate 12A, 13; complete one of the following: Business 1A, Real Estate 16; complete two of the following: Law 5, Real Estate 14B, 18, 19, 20, 21, 26, 31, 41
Total Units: 24-25
Real Estate Appraisal Option: Real Estate 16, 25, 41; complete two of the following: Real Estate 14B, 19, 21, 31; complete two of the following: Business 15, 28, Computer Information Systems 13, Law 6
Total Units: 33
Mortgage Brokerage Option: Business 1A, Real Estate 13, 16, 25, 31; complete two of the following: Real Estate 12A, 14B, 19, 26; complete one of the following: Business 5A, 15, 28
Total Units: 34-35

Certificates of Achievement
A Certificate of Achievement will be granted to the student completing the requirements for the Mortgage Loan Brokerage, Real Estate, Real Estate Appraisal Options. A minimum of 10 units must be completed at El Camino College.
Mortgage Loan Brokerage: Real Estate 11, 13, 14A, 25, 31; Business 1A or Real Estate 16; complete two courses from: Business 17 or Real Estate 14B, Real Estate 12A, 19, 26, 40; complete one course from: Business 5A, 15, 28
Total Units: 27-29
Real Estate: Real Estate 11, 12A, 13, 14A, 25, 40; Business 1A or Real Estate 16; complete two courses from: Law 5, Real Estate 14B, 18, 19, 20, 21, 26, 28, 31, 41
Total Units: 27-28
Real Estate Appraisal: 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.
Total Units: 30

Continuing Education
Special topic seminars approved by the California Department of Real Estate (DRE) to renew real estate licenses are offered within some real estate classes. [Sponsor No. 0170-xxx; per course number.] Many courses are approved by the California Office of Real Estate Appraisal (OREA) for Continuing Education credit for license renewal (Sponsor #95ECC). Check current Schedule of Classes and catalog descriptions for Continuing Education offerings.
Real Estate 14B
Advanced Real Estate Finance
3 units; 3 hours lecture
Prerequisite: Real Estate 14A with a minimum grade of C
Credit, degree applicable
Transfer CSU
This course covers the more advanced methods of financing real estate projects, including non-residential commercial and industrial property. The material presented includes the instruments of finance, types of structured loans, discounting leases, and the sale-leaseback transaction.

Note: The California Department of Real Estate (DRE) has approved this course as one of the elective courses for the real estate broker license. The Office of Real Estate Appraisal (OREA) has approved this course for 54 hours of basic education (BE) credit. OREA has approved this course for 51 hours of continuing education (CE) credit for license renewal provided the student has 90% attendance and passes a closed book final exam.

Real Estate 16
Real Estate Economics
3 units; 3 hours lecture
Recommended Preparation: Real Estate 11, 14A, 15A, or California Department of Real Estate (DRE) license or California Office of Real Estate Appraisal (OREA) license or equivalent experience
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 values in real estate, including urban development, governmental policies, and requirements for development as well as the business and real estate cycles.

Note: This course, or an accounting course, is approved by the California Department of Real Estate (DRE) 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, or an accounting course, is statutorily required for the California DRE broker license. The Office of Real Estate Appraisal (OREA) has approved this course for 54 hours of basic education (BE) credit. OREA has approved this course for 51 hours of continuing education (CE) credit for license renewal provided the student has 90% attendance and passes a closed book final exam.

Real Estate 19
Real Property Management
3 units; 3 hours lecture
Recommended Preparation: Real Estate 11, 12A, or California Department of Real Estate (DRE) license or California Office of Real Estate Appraisal (OREA) license or equivalent experience; Business 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 the legal contracts for rental property, physical maintenance, and trust fund accounting fundamentals including security deposits.

Note: This course is approved by the California Department of Real Estate 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.

Real Estate 21
Real Estate Investment
3 units; 3 hours lecture
Recommended Preparation: Real Estate 11 and Real Estate 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. Strategies on alternatives of a sale, exchange, continuation of operations, capital restructure, depreciation, installment sale and tax basis are covered.

Note: The Office of Real Estate Appraisal (OREA) has approved this course for 54 hours of basic education (BE) credit. OREA has approved this course for 51 hours of continuing education (CE) credit for license renewal provided the student has 90% attendance and passes a closed book final exam.

Real Estate 25
Computer Applications in Real Estate
3 units; 2 hours lecture, 3 hours lab
Prerequisite: Real Estate 11 or concurrent enrollment or equivalent (The California Department of Real Estate (DRE) license or the California Office of Real Estate Appraisal (OREA) license is equivalent.)
Recommended Preparation: Business 54 or Computer Information Systems 13
Credit, degree applicable
In this course students will explore and evaluate basic computer functions and technologies, along with the latest computer software relating to real estate appraisal, property management, finance, escrow, sales, trust funds, record keeping, e-Business, and other areas of real estate.

Real Estate 26
Principles of Escrow
3 units; 3 hours lecture
Recommended Preparation: Real Estate 11, 12A, or California Department of Real Estate (DRE) license or equivalent experience; Business 1A or Business 15
Credit, degree applicable
Transfer CSU
This course introduces the functions and types of escrow. Students are introduced to the procedures used in the escrow industry. Students develop proficiency in common terms of escrow business terminology and the basic escrow steps in a real estate transaction.

Note: The California Department of Real Estate (DRE) has approved this course as one of the elective courses for the eight statutorily required college-level courses of Real Estate Principles and Real Estate Practice. The DRE has approved this course as one of the elective courses for the real estate broker license.

*Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center advisor, or the articulation officer.
Real Estate 31
Mortgage Loan Brokering and Lending
3 units; 3 hours lecture
Recommended Preparation: Real Estate 11 or concurrent enrollment or California Department of Real Estate [DRE] license or equivalent experience; Business 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 Department of Real Estate as one of the elective courses for the eight statute required college-level courses for the broker license and for the salesperson license, which also requires real estate principles and real estate practice.

Real Estate 40
Real Estate Appraisal
3 units; 3 hours lecture
Recommended Preparation: Real Estate 11 or California OREA appraisal license or California DRE broker’s license
Credit, degree applicable
Transfer CSU
This course provides instruction on 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 Department of Real Estate (DRE) has approved this course as one of the elective courses for the real estate broker license. The Office of Real Estate Appraisal (OREA) has approved this course for 54 hours of basic education (BE) credit. OREA has approved this course for 51 hours of continuing education (CE) credit for license renewal provided the student has 90% attendance and passes a closed book final exam.

Real Estate 50
Special Topics in Real Estate
Units determined by individual course; lecture/lab hours determined by individual course
Credit status determined by individual course
This course is designed to explore topics in Real Estate more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

Recreation – A.A. Degree
Health Sciences and Athletics Division
The degree 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.

El Camino College Major Requirements
First Aid 1, Physical Education 217, Recreation 207, 217, 307; plus 7-9 units from: Anatomy 30, Child Development 103, Music 7, Physical Education 242abcd*, 243abcd*, Psychology 5, Sign Language/Interpreter Training 15 (*one semester of)
Total Units: 21-23

Preparation for the 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.

2010-2011 El Camino College Catalog
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.

Recreation 207
Introduction to Recreation
3 units; 3 hours lecture
Recommended Preparation: eligibility for English A or 84
Credit, degree applicable
Transfer CSU - limitations apply
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.

Recreation 217
Recreational Leadership
3 units; 3 hours lecture
Recommended Preparation: eligibility for English A or 84
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.

Respiratory Care 95/96abcd
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
Recommended Preparation: eligibility for English A or 84
Credit, degree applicable
Transfer CSU
This course will provide experience selecting, assembling and equipment. The student will get hands-on experience with respiratory care equipment for proper function, operation and cleanliness. The course will also provide experience performing and understanding the purpose and practice in the Respiratory Care profession.

Respiratory Care 170
Introduction to Respiratory Care Sciences and the Profession
2 units; 2 hours lecture
Recommended Preparation: Medical Assistant 4; eligibility for English 1A and Mathematics 40
Enrollment Limitation: high school graduation or equivalent
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.

Respiratory Care 172
Fundamentals of Cardiopulmonary Physiology and Pharmacology in Respiratory Care
3 units; 3 hours lecture
Prerequisite: Anatomy 30 with a minimum grade of C or concurrent enrollment
Recommended Preparation: Respiratory Care 170 with a minimum grade of C or concurrent enrollment
Enrollment Limitation: high school graduation or equivalent
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.
Respiratory Care – A.S. Degree and Certificate of Achievement

[Helath Sciences and Athletics Division]

The degree and/or certificate in respiratory care are awarded after successful completion of the entry-level respiratory care program. The program is designed for students planning to become California licensed respiratory care practitioners and transfer to an advanced-level respiratory care program at the community college or university level. Completion of the requirements also allows students to apply for national entry-level and 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 employment rates and licensure exam pass rates.

There are three routes to completing the associate degree and/or entry level certificate in Respiratory Care in order to become a licensed practitioner.*

El Camino Community College Major Requirements

**Route I:** Designed for the student without previous college and/or medical work who wishes to obtain the Associate of Science degree and certificate in Respiratory Care. Required coursework includes Respiratory Care 172, 174, 176, 178, 280, 282, 284, 286, 288, Anatomy 30, Computer Information Systems 13, English 1A and Psychology 5. Students without previous medical training are strongly advised to complete Respiratory Care 170 before enrolling in Respiratory Care 172 or 174.
Total Units: 60

**Route II:** Designed for the student planning to transfer to a university advanced-level respiratory care program after completion of the El Camino College entry-level program. Required coursework includes Respiratory Care 172, 174, 176, 178, 280, 282, 284, 286, and 288. In addition, students must meet current coursework requirements (see program director or counselor) for transfer to Loma Linda University or other Respiratory Care bachelor's degree programs. Students without previous medical training are strongly advised to complete Respiratory Care 170 before enrolling in Respiratory Care 172 or 174.
Total Units: 46

Certificate of Achievement

A Certificate of Achievement is granted to the student who completes the following route:

**Route III:** Designed for the student with previous college coursework equivalent to an associate degree or higher, and/or with medical education and credentials who wishes to obtain the certificate in Respiratory Care. The student must have the equivalent of an associate degree or higher in order to be granted the certificate. Take, or pass through credit-by-examination**, Respiratory Care 172, 174, 176, 178, 280, 282, 284, 286, 288 and transfer in, or have evaluated as equivalent, or pass through credit-by-examination**, Anatomy 30, Computer Information Systems 13, English 1A, and Psychology 5. Students without previous medical training are strongly advised to complete Respiratory Care 170 before enrolling in Respiratory Care 172 or 174.
Total Units: 62

*No matter which route is taken, the certificate in Respiratory Care is not granted unless the student completes the Respiratory Care course requirements and has accumulated college credit equivalent to an associate’s degree (with a minimum grade of C in all courses). This includes those non-respiratory courses required by the Respiratory Care Program and the State of California Respiratory Care Board.

**See college and program credit-by-examination policy, procedures, and limitations.

[Continued on next page]
Respiratory Care

Recommended Preparation Course Sequence and Prerequisites

The program has two phases that require specific courses and sequence.

Preclinical Phase
In the pre-clinical phase of the program the student takes all the non-clinical Respiratory Care courses which may include Respiratory Care 170. The student shall also complete, at a minimum, Respiratory Care 172 and 174, Anatomy 30, Computer Information Systems 13, English 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 of science degree. (See program director or counselor.)

Admission to the Clinical Phase
Admission to the clinical phase of the program is limited by clinical space and budget consideration. 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 and fall semesters and students are randomly assigned seats in the next clinical class based on verification of all required coursework and available space. A new clinical class starts in the spring semester each year.

Clinical Phase
In the 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 certificate which, at a minimum, includes Respiratory Care 176 through 288. In addition, the student must complete all other courses required for the associate of science degree if they have not been completed in the preclinical phase.

Cost
In addition to any fees or charges imposed by the college, it is estimated that the cost of books, lab costs, stethoscopes and miscellaneous supplies is approximately six hundred dollars over a two-year period. Financial assistance is available to students who meet the eligibility requirements. A health physical examination is required.

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 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.

Respiratory Care 280
Respiratory Care of the Critically Ill Patient II
9 units; 4 hours lecture, 15 hours lab per week to be arranged
Prerequisite: Respiratory Care 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.

Respiratory Care 282
Fundamentals of Perinatal and Pediatric Respiratory Care
4 units; 2 hours lecture, 6 hours lab per week to be arranged
Prerequisite: Respiratory Care 178 with a minimum grade of C
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.

Respiratory Care 284
Respiratory Care of the Critically Ill Patient III
9 units; 4 hours lecture, 15 hours lab per week to be arranged
Prerequisite: Respiratory Care 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.

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Respiratory Care 286  
**Fundamentals of Pulmonary Rehabilitation and Home Respiratory Care**  
3 units; 2 hours lecture, 3 hours lab per week to be arranged  
Prerequisite: Respiratory Care 280 with a minimum grade of C  
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.

Respiratory Care 288  
**Fundamentals of Pulmonary Function Testing**  
3 units; 2 hours lecture, 3 hours lab  
Prerequisite: Respiratory Care 176 with a minimum grade of C  
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.

School Health Clerk – Certificate of Achievement  
(Health Sciences and Athletics Division)  
By completing the certificate requirements, students will acquire proficiency in the role of the school health clerk paraprofessional. Students will gain knowledge of the legal and ethical responsibilities within the school health clerk role; communication skills; health and wellness concepts; chronic and acute health conditions; psychosocial problems; common treatment protocols; first aid and CPR techniques; health information and office management; and disaster planning. Observational experiences focusing on the roles and responsibilities of school health clerks will be provided in local school districts. Certificate competencies will be assessed regularly through written assignments and examinations. The curriculum prepares students for entry-level school health clerk positions within school districts and various community agencies.

Certificate of Achievement  
A Certificate of Achievement will be granted upon completion of the courses listed below. A minimum of 12 units of the certificate requirements, including Nursing 110, 112, and 114, must be completed at El Camino College.  
Child Development 103, 110, 111, Nursing 110, 112, 114;  
Total Units: 18

Secretarial  
See Business

Shop Mathematics  
See Technical Mathematics

Sign Language/Interpreter Training  
**Sign Language/Interpreter Training 15**  
*Beginning American Sign Language*  
3 units; 2 hours lecture, 3 hours lab  
Credit, degree applicable  
Transfer CSU, UC  
This beginning course in American Sign Language (ASL) is taught within the context of deaf culture. The course offers instruction and practice with basic grammatical features of ASL. Primary emphasis of the class is on developing comprehension skills, vocabulary development, and visual readiness. It is recommended for those who wish to prepare for professional or social contact with the deaf. It is the first course of a sequence leading toward competency as a professional interpreter.  
Note: This course is comparable to two years of high school sign language.

Sign Language/Interpreter Training 16  
*Intermediate American Sign Language*  
3 units; 2 hours lecture, 3 hours lab  
Prerequisite: Sign Language/Interpreter Training 15 with a minimum grade of C  
Credit, degree applicable  
Transfer CSU, UC  
This course is recommended for students who wish to continue their study of the deaf culture and increase their ability to communicate in American Sign Language (ASL). This course focuses on ASL structure and grammatical features as used by native signers. It will develop language fluency at the intermediate level. This course is required for those continuing in the sequence leading toward professional competency as an interpreter.  
Note: The prerequisite for this course is comparable to two years of high school sign language.

*Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center advisor, or the articulation officer.*
Upon completion of the degree or certificate, the student will be prepared for entry-level jobs interpreting in the educational, medical, and community settings. Students will obtain instruction in general communication skills for working with deaf and hearing-impaired individuals as well as acquire an understanding of the deaf culture. In the interpreting-level courses, students will gain technical skills, poise, and proficiency. The student will develop speed and accuracy in both simultaneous and consecutive interpreting. Skills will be assessed through regular examinations, mock interviews, and portfolio review. Program assessment is conducted by monitoring student employment rates.

El Camino College Major Requirements
Sign Language/Interpreter Training 15, 16, 17A, 17B, 18A, 18B, 19, 20, 201 or 202, 214, 263, 264; choose one: Child Development 150, Communication Studies 1, Theatre 8, 30
Total Units: 32

Certificate of Achievement
A Certificate of Achievement will be granted to the student who completes the courses listed below.
Sign Language/Interpreter Training 15, 16, 17A, 17B, 18A, 18B, 19, 20, 201 or 202, 214, 263, 264, English 1A; choose one: Child Development 150, Communication Studies 1, Theatre 8, 30
Total Units: 36

Sign Language/Interpreter Training 17A
Advanced American Sign Language
3 units; 2 hours lecture, 3 hours lab
Prerequisite: Sign Language/Interpreter Training 16 with a minimum grade of C
Credit, degree applicable
Transfer CSU, UC
This course is designed for students who wish to develop technical and grammatical knowledge of American Sign Language at the advanced level. Taught within the context of deaf culture, students will increase their ability to communicate in American Sign Language (ASL). This course focuses on ASL structure and grammatical features as used by native signers. Multimedia presentations, activities, and exercises are designed to develop language fluency for communicating with members of the deaf community. This course is required for those continuing in the sequence leading toward professional competency as an interpreter.

Note: The prerequisite for this course corresponds to three years of high school sign language.

Sign Language/Interpreter Training 17B
Advanced American Sign Language: Comprehending ASL
3 units; 2 hours lecture, 3 hours lab
Prerequisite: Sign Language/Interpreter Training 17A with a minimum grade of C or equivalent
Credit, degree applicable
Transfer CSU, UC
This course uses multimedia presentations, activities, and exercises for advanced practice using American Sign Language. The course will provide students with cultural information and current linguistic research. This advanced course is designed to help students comprehend American Sign Language and its grammatical features.

The hours per week of courses may be adjusted based on the length of the term.

Sign Language/Interpreter Training 18A
Fundamentals of Interpreting and Translating
3 units; 2 hours lecture, 3 hours lab
Prerequisite: Sign Language/Interpreter Training 17B with a minimum grade of C
Corequisite: enrollment in Sign Language/Interpreter Training 263
Credit, degree applicable
Transfer CSU
This course is designed to bring students to a beginning level of fluency for general interpreting and transliterating situations. The focus will be on both consecutive interpreting and simultaneous interpreting modes of delivery. It will also explore the professional Code of Conduct and preparation toward national certification.

Sign Language/Interpreter Training 18B
Applied Interpreting and Translating Technique
2 units; 1 hour lecture, 3 hours lab
Prerequisite: Sign Language/Interpreter Training 18A with a minimum grade of C
Credit, degree applicable
Transfer CSU
This course offers skills development at the advanced level. It provides interpreting practice in specific areas such as interpreting for multi-cultural deaf individuals, deaf-blind interpreting, medical interpreting, legal interpreting, and educational interpreting. The focus will be on the execution of skills in both consecutive and simultaneous interpreting and transliterating modes.

Sign Language/Interpreter Training 19
Advanced Interpreting:
Sign to Voice
3 units; 2 hours lecture, 3 hours lab
Prerequisite: Sign Language/Interpreter Training 18B with a minimum grade of C
Corequisite: enrollment in Sign Language/Interpreter Training 264
Credit, degree applicable
Transfer CSU
This course focuses on development of sign to voice interpretation skills. Specific techniques in linguistic and cultural mediation, style variations, and team interpreting will be learned. Topics will include the interpreting process, self analysis, and ethical conduct.
Sign Language/Interpreter Training 20

Interpreting Practicum
3 units; 2 hours lecture, 3 hours lab to be arranged
Prerequisite: Sign Language/Interpreter Training 18A with a minimum grade of C
Credit, degree applicable
Transfer CSU

This course provides practical interpreting experience for students completing the Sign Language/Interpreter Training Program. The course includes field work and classroom attendance. Activities and exercises are designed to guide the student through steps of establishing a freelance interpreting business. Discussions and lectures will concentrate on the issues and concerns that arise during the practice assignments.

Sign Language/Interpreter Training 22

Educational Interpreting
2 units; 1 hour lecture, 3 hours lab
Prerequisite: Sign Language/Interpreter Training 18A with a minimum grade of C
Credit, degree applicable

This course will help prepare students for interpreting in the educational field. Focus will be on transliterating and interpreting skills, roles and ethics unique to educational settings, classroom accessibility, and enhancement of academic sign vocabulary. This course is appropriate for students interested in interpreting for schools, vocational programs, colleges, and universities.

Sign Language/Interpreter Training 50

Special Topics in Sign Language/Interpreter Training
Units determined by individual course; lecture/lab hours determined by individual course
Credit status determined by individual course

This course is designed to explore topics in Sign Language/Interpreter Training more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

Sign Language/Interpreter Training 95abcd

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 - limitations apply

This course is designed to explore topics in Sign Language/Interpreter Training. It will provide students with the opportunity to work as interpreters or transliterators in a variety of settings. Students will receive practical experience in interpreting and transliterating in a variety of settings, including schools and colleges, community organizations, and businesses.

Sign Language/Interpreter Training 101abcd

Individualized American Sign Language Laboratory
1 unit; 3 hours lab 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 an opportunity for students to develop and practice individualized American Sign Language (ASL) skills. Students will work with a tutor to develop a personalized program of study to meet their specific needs.

Sign Language/Interpreter Training 201

Perspective on Deafness
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 84
Credit, degree applicable
Transfer CSU

In this course, students will explore the perspective of deafness from both a hearing and deaf perspective. Current topics and issues include sign language, acquisition of language, educational trends, and experiments and research. Students will gain an understanding of psychological and social implications of deafness.

Sign Language/Interpreter Training 202

Deaf Culture
3 units; 3 hours lecture
Recommended Preparation: eligibility for English 84
Credit, degree applicable
Transfer CSU, UC

This course is designed to explore the anthropologic, historical, linguistic, social and ideological constructs of deaf people and their communities. Discussion and topics will provide the student with an in-depth knowledge of the issues of being a deaf individual in a hearing world and trends of the deaf culture.

Sign Language/Interpreter Training 214

Fingerspelling and Numerical Concepts
1 unit; 3 hours lab
Credit, degree applicable
Transfer CSU

This course is designed to provide beginning and advanced practice with the sign language component known as fingerspelling. Through the use of video tapes, drills, and exercises, the student will receive practice in comprehending and using the manual alphabet and numerical signs.

Note: Pass/no pass only

Sign Language/Interpreter Training 263

Interpreting/Transliterating Laboratory
1 unit; 3 hours lab
Prerequisite: Sign Language/Interpreter Training 17B with a minimum grade of C
Corequisite: Sign Language/Interpreter Training 18A
Credit, degree applicable
Transfer CSU

This course is designed for students seeking further practice with consecutive and simultaneous interpreting skills in a lab setting. The students will receive additional practice with vocabulary and terminology in both American Sign Language and English. Through the use of multimedia, activities, and exercises, skills with interpreting and transliterating will be enhanced.

Note: Pass/no pass only

The hours per week of courses may be adjusted based on the length of the term.

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Sociology 50
Special Topics in Sociology
Units determined by individual course; lecture/lab hours determined by individual course
Credit status determined by individual course
This course is designed to explore topics in Sociology more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

Sociology 96abcd
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 - limitations apply
This course provides advanced practice in a lab setting. It will enhance sign to voice interpreting and translating skills. Students will participate in exercises and activities designed to increase comprehension skills and spoken presentations. Students will also practice both sign to voice consecutive and simultaneous interpreting.
Note: Pass/no pass only

Sociology – A.A. Degree
(behavioral and Social Sciences Division)

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 careers in 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 and research techniques.

El Camino College Major Requirements
Sociology 101, 104; Sociology 109 or Psychology 9A or Mathematics 150; three courses from: American Studies 7, Anthropology 2, 9; Mathematics 140 or 160 or 190; Psychology 12, 16, Sociology 102, 107, 108, 110, 112, Women’s Studies 1
Total Units: 19

Preparation for the 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.

Sociology 102
The Family
3 units; 3 hours lecture
Recommended Preparation: Sociology 101; eligibility for English 1A
Credit, degree applicable
Transfer CSU, UC
This course covers the sociological and psychological components of family living practiced in the United States and in various cultures worldwide. Topics include singlehood, love, cohabitation, marriage, divorce, cultural and historical variation, communication, and conflict resolution.

Sociology 104
Social Problems
3 units; 3 hours lecture
Recommended Preparation: Sociology 101; eligibility for English 1A
Credit, degree applicable
Transfer CSU, UC
In this course social problems facing societies today are examined. Topics include problems associated with deviance, crime, inequality, social institutions, and modernization. Social problems will be analyzed from various sociological perspectives to better understand their possible causes and consequences. Strategies for addressing social problems will be discussed and assessed.
Sociology 107  
Race and Ethnicity in United States Society  
3 units; 3 hours lecture  
Recommended Preparation: Sociology 101; eligibility for English 1A  
Credit, degree applicable  
Transfer CSU, UC  
This course introduces students to the sociological study of race and ethnic relationships in American society. Sociological concepts and theories are used to analyze the recent and historical experiences of groups which have been defined in racial and ethnic terms. The focus of the course will be on the origins and consequences of these definitions for the life experiences and opportunities of these groups.

Sociology 108  
Global Perspectives on Race and Ethnicity  
3 units; 3 hours lecture  
Recommended Preparation: eligibility for English 1A, Sociology 101 or Sociology 107 or Anthropology 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.

Sociology 109  
Introduction to Elementary Statistical Methods for the Study of Behavior  
4 units; 3 hours lecture, 3 hours lab  
Prerequisite: Sociology 101 or Psychology 5 and Mathematics 80 with a minimum grade of C in prerequisite  
Credit, degree applicable  
Transfer CSU, UC  
This is a course in statistical methods and research design for the behavioral sciences. The course focuses on descriptive and inferential statistical techniques for summarizing research data and for making conclusions about the populations they represent. Students are introduced to the basic challenges and skills involved in successful undergraduate and graduate training in the behavioral sciences, including both reviewing and writing scientific research reports.  
Note: Sociology 109 is the same course as Psychology 9A.  
*Note: The maximum UC credit allowed for students completing Sociology 109 and Psychology 9A or Sociology 109 and Mathematics 150 is one course.

Sociology 110  
(formerly Sociology 10)  
Introduction to Social Work  
3 units; 3 hours lecture  
Recommended Preparation: Sociology 104  
Credit, degree applicable  
Transfer CSU  
This course introduces students to the field of social work emphasizing the skills, responsibilities, and varieties of social work settings. Various social problems, such as child neglect, domestic violence, and poverty, are analyzed to understand how social workers address these issues at the individual, group, and community levels. Social policies such as domestic violence laws, foster care, and the welfare system are also examined.

Sociology 112  
Introduction to Criminology  
3 units; 3 hours lecture  
Recommended Preparation: Sociology 101; eligibility for English 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.

Spanish 1  
Elementary Spanish I  
4 units; 5 hours lecture  
Recommended Preparation: eligibility for English A  
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 every day life. Technological support includes 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 Spanish.  
*Note: The maximum UC credit allowed for students completing Spanish 1 and Spanish 52A and 52B is four units.

Spanish 2  
Elementary Spanish II  
4 units; 5 hours lecture  
Prerequisite: Spanish 1 with a minimum grade of C or equivalent  
Credit, degree applicable  
Transfer CSU, UC  
This course, taught within the context of Spanish and Spanish-American culture, 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 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 Spanish.

Spanish 3  
Intermediate Spanish I  
4 units; 5 hours lecture  
Prerequisite: Spanish 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 Spanish-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 Spanish-American authors.  
Note: The prerequisite for this course is comparable to three years of high school Spanish.
Spanish – A.A. Degree

[Humanities Division]

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 text 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.

El Camino College Major Requirements

0-8 units from Spanish 1 and 2 or 0-6 units from Spanish 5A and 5B; Spanish 3, 4, 5, 6; one course from: Anthropology 7, Art 7, English 42, History 112, 154

Total Units: 20-28

Preparation for the 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.

Spanish 4

Intermediate Spanish II

4 units; 5 hours lecture
Prerequisite: Spanish 3 with a minimum grade of C or equivalent
Credit, degree applicable
Transfer CSU, UC

This course, taught within the context of Spanish and Spanish-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. Students read materials of representative Spanish and Spanish-American authors and participate in daily conversations.

Note: The prerequisite for this course is comparable to four years of high school Spanish.

Spanish 5

Advanced Spanish I

3 units; 3 hours lecture
Prerequisite: Spanish 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.

Spanish 6

Advanced Spanish II

3 units; 3 hours lecture
Prerequisite: Spanish 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, 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.

Spanish 21ab

Beginning Conversational Spanish

2 units; 2 hours lecture
Prerequisite: Spanish 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.

Spanish 22ab

Intermediate Conversational Spanish

2 units; 2 hours lecture
Prerequisite: Spanish 2, Spanish 21ab 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.

Spanish 24

Introduction to Spanish and Latin American Language and Cultures

3 units; 3 hours lecture
Recommended Preparation: eligibility for English 1A
Credit, degree applicable
Transfer CSU

This course provides an introduction to the cultural aspects of the Spanish language through a study of Spanish and Latin American culture, geography, social institutions, literature, art, architecture, and music. Topics include a comparison of Spanish and other Western languages and cultures.

Spanish 50

Special Topics in Spanish

Units determined by individual course; lecture/lab hours determined by individual course
Credit status determined by individual course

This course is designed to explore topics in Spanish more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

*Some UC transferable courses have credit limitations.
For details, see a counselor, the Transfer Center advisor, or the articulation officer.
Spanish 52A
Spanish for Native Speakers
3 units; 3 hours lecture
Prerequisite: Spanish 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 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 Spanish 1 and Spanish 52A and 52B is four units.

Spanish 52B
Spanish for Native Speakers
3 units; 3 hours lecture
Prerequisite: Spanish 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 Spanish 1 and Spanish 52A and 52B is four units.

Spanish 99abc
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, UC - limitations apply
This course provides special advanced studies in a subject field of Spanish education not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Spanish education projects (60 hours per unit).
Note: Refer to page 11 of this Catalog for eligibility requirements.

Special Education
See Educational Development

Speech
Communication
See Communication Studies

The hours per week of courses may be adjusted based on the length of the term.

Supervision

Supervision 27
Oral Business Communications
3 units; 3 hours lecture
Recommended Preparation: eligibility for English A
Credit, degree applicable
Transfer CSU
In this course, students will learn the principles of effective speaking in business situations. Interviews, conferences, briefings, and group discussions will be covered. Techniques of research, preparation, presentation, and evaluation are emphasized.
Note: Supervision 27 is the same course as Business 29.

Teaching

Preschool Teaching
Child Development courses are designed primarily for students interested in working in private or public programs serving infants, toddlers, preschoolers, children with special needs, or children enrolled in before and after school care. Please refer to the course listings and program requirements in the Childhood Education section of this catalog.

Elementary School Teaching (Grades K-5)
Students interested in teaching elementary school must first earn a bachelor’s degree, pass specific state examinations (i.e., the California Basic Education Skills Test, the California Subject Exam for Teachers, and the Reading Instruction Competence Assessment), demonstrate knowledge of the U.S. Constitution either through a course or exam, complete foundational computer technology coursework, complete a Multiple Subject Teaching Credential Program at the university level, and obtain a character clearance. Note: Though prospective elementary school teachers may select any major, the Liberal Studies major is recommended because it best prepares students for the aforementioned exams as well as for the profession itself. For this reason, El Camino College offers a Liberal Studies Program that is designed for students who plan to teach elementary school. For more information, please refer to the Liberal Studies Program in this catalog or contact the El Camino College Teacher Education Program at 310-660-3573. You may also visit the program on the Web at: www.elcamino.edu/childhood_education.

Middle/High School Teaching (Grades 6-12)
Students interested in teaching middle or high school must first earn a bachelor’s degree in the subject they plan to teach, pass the California Basic Education Skills Test, pass the California Subject Exam for Teachers in their field, if they did not earn their bachelor’s degree through an approved subject matter preparation program), demonstrate knowledge of the U.S. Constitution either through a course or exam, complete foundational computer technology coursework, complete a Single Subject Teaching Credential Program at the university level, and obtain a character clearance. El Camino College offers Associate in Arts and Associate in Science degrees in a variety of majors suitable for students who wish to teach at the middle or high school level. For more information, please contact the El Camino College Teacher Education Program at 310-660-3573. You may also visit the program on the Web at: www.elcamino.edu/childhood_education.

The El Camino College Teacher Education Program (TEP) supports students seeking any of the teaching careers listed above.
Technical Mathematics

**Technical Mathematics 1**

*Technical Mathematics for Vocational Students*

3 units; 3 hours lecture
Credit, degree applicable

This is a basic technical mathematics course covering prime numbers, addition, subtraction, multiplication and division of signed numbers and decimals, fractions (including mixed numbers and compound fractions), ratios, proportions, percentages, accuracy of measurements, exponents, roots, and an introduction to equations and inequalities. Applications will relate to problems commonly found in industrial settings.

Theatre

**Theatre 1**

*Theatre Appreciation*

3 units; 3 hours lecture
Recommended Preparation: eligibility for English 84 or ESL 52C
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.

**Theatre 4**

*Dramatic Literature*

3 units; 3 hours lecture
Recommended Preparation: eligibility for English 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.

Theatre – A.A. Degree

*(Fine Arts Division)*

The degree 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.

**El Camino College Major Requirements**

Theatre 1, 4, 14A, 14B, 84, 90, 94; three units from: Theatre 70abcd or 97abcd (with a minimum of 1 unit from: Theatre 97abcd); 2 to 3 units from: Theatre 15abcd, 16abcd, 22ab, 40A, 88, 92
Total Units: 26-27

**Preparation for the 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 8**

*Introduction to Acting*

3 units; 2 hours lecture, 3 hours lab
Recommended Preparation: eligibility for English 84 or ESL 52C
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.

**Theatre 14A**

*Fundamentals of Acting*

3 units; 2 hours lecture, 3 hours lab
Recommended Preparation: eligibility for English 84 or ESL 52C
Credit, degree applicable
Transfer CSU, UC

This course is a continuation of Theatre 14A 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.

**Theatre 14B**

*Intermediate Acting*

3 units; 2 hours lecture, 3 hours lab
Prerequisite: Theatre 14A with a minimum grade of C
Credit, degree applicable
Transfer CSU, UC

This course is a continuation of Theatre 14A 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.

**Theatre 15abcd**

*Improvisation*

2 units; 1 hour lecture, 3 hours lab
Recommended Preparation: Theatre 8 or 14A
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.

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Theatre 16abcd

**Acting: Audition and Cold Reading**
3 units; 2 hours lecture, 3 hours lab
Prerequisite: Theatre 14A 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.

Theatre 22ab

**Acting Shakespeare**
3 units; 2 hours lecture, 3 hours lab
Prerequisite: Theatre 8 or 14A with a minimum grade of C 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.

Theatre 40A

**Fundamentals of Stage Direction**
3 units; 2 hours lecture, 3 hours lab
Prerequisite: Theatre 14B 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.

Theatre 50

**Special Topics in Theatre**
Units determined by individual course; lecture/lab hours determined by individual course
Credit status determined by individual course

This course is designed to explore topics in Theatre more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

Theatre 70abcd

**Beginning Theatre Production**
1 unit; 3 hours lab (plus extended rehearsal hours to be arranged)
Enrollment Limitation: audition
Credit, degree applicable
Transfer CSU, UC

This theatre production course serves as an acting workshop. Students learn performance skills and rehearsal discipline through active participation in a major theatrical production. This is an intensive course with extended rehearsal hours to be arranged.

Theatre 72ab

**Advanced Theatre Production**
1 unit; 3 hours lab (plus extended rehearsal hours to be arranged)
Enrollment Limitation: audition
Credit, degree applicable
Transfer CSU, UC

This course is an advanced acting workshop in which students learn to enhance performance skills and rehearsal discipline through active participation in a major theatrical production. This is an intensive course with extended rehearsal hours to be arranged.

Theatre 74abcd

**Musical Theatre Production**
1 unit; 3 hours lab (plus extended rehearsal hours to be arranged)
Enrollment Limitation: audition
Credit, degree applicable
Transfer CSU, UC

This course is a musical theatre workshop. Students learn performance skills and rehearsal discipline through active participation in a major musical theatrical production that integrates singing, dancing, and acting. This is a time and labor intensive course with extended rehearsal hours to be arranged.

Theatre 75abcd

**Student Performance Production Workshop**
1 unit; 3 hours lab to be arranged
Recommended Preparation: completion of or concurrent enrollment in the following:
1. Student performers: Theatre 8 or 14A; 2. Student directors: Theatre 40A; 3. Student crews: Theatre 84 or 90 or 92 or 97abcd; eligibility for English 84
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.

Theatre 84

**Stagecraft**
3 units; 2 hours lecture, 3 hours lab
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.

Theatre 88

**Fundamentals of Stage Makeup**
2 units; 1 hour 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 facial distortions.

Theatre 90

**Introduction to Stage Lighting and Sound**
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.

*Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center advisor, or the articulation officer.
Theatre 94
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, pattern making, fabric design and dyeing, proper use and maintenance of equipment, and the duties of wardrobe crews and chief. Students must attend selected theatre events at El Camino College Center for the Arts.

Theatre 95abcd
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 - limitations apply
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: The total units earned for CWEE may not exceed 16 units.

Theatre 97abcd
Technical Theatre Production
1 unit; minimum 54 hours lab per semester to be arranged
Credit, degree applicable
Transfer CSU, UC
This course provides students with experience in building, mounting, and running departmental play productions. Emphasis is placed on preparation (setup, construction of scenery, lighting, properties, costumes) and on the running crew positions (properties, costumes, makeup, follow spot, deck hand, and assistant stage manager).

The hours per week of courses may be adjusted based on the length of the term.

Theatre 98ab
Advanced Technical Theatre Production
1 unit; minimum 54 hours lab per semester to be arranged
Prerequisite: four semesters of Theatre 97abcd with a minimum grade of C
Credit, degree applicable
Transfer CSU, UC
This course is an advanced performance/rehearsal laboratory to support the public presentation of the Theatre Department. Emphasis will be placed on the role of technical theatre production heads including properties, costume, sound, lights, makeup, and deck crew. Stage management of public performances will also be covered.

Theatre 99abc
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, UC - limitations apply
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 (60 hours per unit).
Note: Refer to page 11 of this Catalog for eligibility requirements.

Transfer Studies – Certificates of Achievement
(Behavioral and Social Sciences Division)

Transfer Studies - Certificate of Achievement
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 at the Records window.
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 at the Records window.
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 on completing transfer admission requirements.
Total Units: 34

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Welding – A.S. Degree and Certificates of Achievement

(Industry and Technology Division)

The welding program prepares student for employment in the field and provides upgrade opportunities for currently employed personnel. By completing the degree or certificate requirements, students gain proficiency in the following welding processes: oxy-acetylene cutting, plasma arc cutting, brazing and welding, 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. Students also acquire proficiency in blueprint reading, layout, structural fabrication, and pipe welding. Competencies will be assessed regularly in accordance with criteria established by the American Welding Society, the American Petroleum Institute, the American Society of Mechanical Engineers, and the American National Standards Institute.

El Camino College Major Requirements

Day Program: 24 units from: Welding 1, 2abc
Evening Program: complete a minimum of 24 units from: Welding 21, 23abc, 40abcd, 45ab
Recommended Electives: Computer Aided Design/Drafting 5, Machine Tool Technology 16ab, Technical Mathematics 1, English A or qualifying score for English 1A on the English Placement Test
Total Units: 24-27

Certificates of Achievement

A Certificate of Achievement will be granted upon completion of the courses in the day or evening program for the Welding I or Welding II options. At least 50% of the courses required for the Certificate of Achievement must be completed at El Camino College.

Welding I:

Day Program: Complete 32 units from: Welding 1, 2abc
Evening Program: Complete a minimum of 32 units from: Welding 21, 23abc, 40abcd, 45ab
Total Units: 32

Welding II:

Day Program: Complete 32 units from: Welding 1, 2abc; complete 9-12 units from: Computer Aided Design/Drafting 5, Machine Tool Technology 16ab, Technical Mathematics 1, English A or qualifying score for English 1A on English Placement Test
Total Units: 41-44

Evening Program: Complete a minimum of 32 units from: Welding 21, 23abc, 40abcd, 45ab; complete 9-12 units from: Computer Aided Design/Drafting 5, Machine Tool Technology 16ab, Technical Mathematics 1, English A or qualifying score for English 1A on English Placement Test
Total Units: 41-44

Welding 15ab

Basic Welding for Allied Fields

3 units; 2 hours lecture, 4 hours lab
Credit, degree applicable
Transfer CSU

This is a basic course for students in allied fields that utilize welding processes. Students will be introduced to welding equipment, nomenclature, safety, and the oxy-acetylene, shielded metal arc, and gas metal arc welding processes. Manipulative skills will be developed in cutting and welding in the flat and in the vertical down positions.

Welding 21

Basic Shielded Metal Arc Welding (SMAW)

3 units; 2 hours lecture, 4 hours lab
Credit, degree applicable
Transfer CSU

This is a basic course in shielded metal arc welding designed to provide the student with manipulative cutting and welding skills in the flat and horizontal fillet positions. The course also includes a study of welding nomenclature, equipment, occupational safety, joint design, electrode classification, weld symbols, and blueprint reading.
Welding 23abc  
**Arc Welding Certification**  
3 units; 2 hours lecture, 4 hours lab  
Prerequisite: Welding 1 or 21 with a minimum grade of C in prerequisite  
Credit, degree applicable  
Transfer CSU  
This course is designed for the advanced arc welding student preparing for an American Welding Society (AWS) Structural and Light Gauge Certification, Los Angeles City Structural Light Gauge and Reinforcing Steel Welding Certification or California State Welding Certification.

Welding 27abc  
**Pipe Welding and Pipe Fabrication**  
4 units; 2 hours lecture, 6 hours lab  
Prerequisite: Welding 1 or Welding 21 with a minimum grade of C in prerequisite  
Credit, degree applicable  
Transfer CSU  
This course is designed to introduce the student to pipe welding procedures and pipe fabrication. The course covers types of pipe and piping, identification of pipe, pipe welding procedures and processes, joint fabrication, and pipe layout procedures.

Welding 40abcd  
**Gas Tungsten Arc Welding (GTAW), Gas Metal Arc Welding (GMAW)**  
3 units; 2 hours lecture, 4 hours lab  
Credit, degree applicable  
Transfer CSU  
In this course, students will develop manipulative skills using Gas Tungsten Arc Welding (GTAW) and Gas Metal Arc Welding (GMAW) processes on ferrous and nonferrous alloys. Emphasis is placed on the requirements for certification in accordance with AWS D.17.1:2001, specifications for Fusion Welding for Aerospace Applications (formerly Mil-Standard-1595A Qualifications of Aircraft, Missile and Aerospace Fusion Welders).

Welding 45ab  
**Structural Fabrication**  
5 units; 4 hours lecture, 4 hours lab  
Prerequisite: Welding 1 or 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.

Welding 50  
**Special Topics in Welding**  
Units determined by individual course; lecture/lab hours determined by individual course  
Credit status determined by individual course  
This course is designed to explore topics in Welding more specific than provided in other courses in the regular departmental curriculum. Students are referred to the current schedule of classes for details of specific courses.

Welding 95abcd  
**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 - limitations apply  
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: The total units earned for CWEE may not exceed 16 units.

Welding 99abc  
**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 - limitations apply  
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 (60 hours per unit).  
Note: Refer to page 11 of this Catalog for eligibility requirements.

The hours per week of courses may be adjusted based on the length of the term.
Administration

Thomas M. Fallo
Superintendent/President

Francisco M. Arce
Vice President, Academic Affairs

Jo Ann Higdon
Vice President, Administrative Services

Jeanie M. Nishime
Vice President, Student and Community Advancement

Barbara Perez
Vice President, El Camino College Compton Center

Lynn Solomita
Interim Vice President, Human Resources

Deans

Jose Anaya
Community Advancement

Constance Fitzsimons
Fine Arts

Donald Goldberg
Mathematical Sciences

Thomas Lew
Humanities

Gloria E. Miranda
Behavioral and Social Sciences

Rory Natividad
Interim, Health Sciences and Athletics

Virginia L. Rapp
Business

Stephanie Rodriguez
Industry and Technology

Jean Shankweiler
Natural Sciences

Regina R. Smith
Counseling and Student Services

Arvid Spor
Enrollment Services

Associate Deans

Thomas Jackson
Industry and Technology

Barbara Jaffe
Humanities

Directors/Managers

Kim Baily
Nursing

Robert Barbone
Athletic Director

Leisa Biggers
Staff and Student Diversity

Rocky Bonura
Business Services

Julie Bourlier
Bookstore

Hortense Cooper
Financial Aid and Scholarship

Robin Dreizler
Outreach and School Relations

Janice Ely
Business Manager

Robert Gann
Facilities Planning and Services

Ann M. Garten
Community Relations

Irene Graff
Institutional Research

Alice Grigsby
Learning Resources

Arturo Hernandez
MESA

Bozina Morton
Resource Development - Grant Development and Management

William Mulrooney
Admissions and Records

Sandra Parvis
Child Development Center

Dipte Patel
Special Resource Center

Dawn Reid
Extended Opportunity Programs and Services

Bruce L. Spain
Center for the Arts

Michael J. Trevis
Chief of Police/Public Services Instructional Programs

Harold L. Tyler
Student Development

John Wagstaff
Information Technology Services

Tom Connolly
Accounting

Assistant Directors

Thomas Brown
Facilities Planning and Services

Bruce Hoerning
Facilities Planning and Services

Jeanette Magee
EOP&S/CalWORKs

Andrew Nasatir
Bookstore

Esperanza Nieto
Admissions and Records

Allene Quaries
Human Resources

Tyler Robbins
Financial Aid and Scholarships

Betty Sedor
Community Education and Development

Satish Warrier
Information Technology Services

Specially Funded Programs

Pauline G. Annarino
Director, Western Region Interpreter Education Center

Katie Gleason
Executive Director – El Camino College Foundation

David Gonzales
Director, Center for Applied Competitive Technologies

Maurice Kogon
Director, Center for International Trade Development

Phillip Sutton
Director, Workplace Learning Resource Center

Starleen Van Buren
Director, Small Business Development Center

Vacant
Director, Contract and Community Education

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Faculty

Acknowledging that the quality of a college is largely dependent upon the quality of its faculty, El Camino College endeavors to maintain a consistently superior teaching staff. In height of academic achievement, breadth of practical experience, and depth of personal dedication, the instructors at El Camino College are among the finest in California.

The College’s faculty makes policy recommendations on academic and professional matters to the administration and to the Board of Trustees. Its governing arm is the Academic Senate composed of representatives from each division.

The Academic Senate has developed the academic rank. It is not an official appointment by the Board of Trustees but, instead, is a traditional practice which recognizes professional preparation and experience.

Qualifications for academic rank are based on these requirements:

Lecturer: All adjunct and temporary faculty members have this rank. Adjunct faculty who have previously taught 10 consecutive semesters are listed in this catalog.

Instructor: This rank is for probationary (contract) faculty members who do not qualify for higher rank.

Assistant Professor: Faculty members who have achieved regular faculty status or tenure.

Associate Professor: Tenured faculty members who are at least at Step 7 on the salary schedule.

Professor: Tenured faculty members who are at least at Step 10 (Class V) on the salary schedule or Step 13 (Class I-IV) on the salary schedule.

Qualifications for academic rank are:

- Professional preparation and experience.
- A tradition which recognizes academic rank. It is not an official appointment by the Board of Trustees but, instead, is a traditional practice which recognizes professional preparation and experience.
- The College's faculty makes policy recommendations on academic and professional matters to the administration and to the Board of Trustees. Its governing arm is the Academic Senate composed of representatives from each division.

Academic Senate Officers

David Vakil, President
Saual Panski, Vice President, Compton Community Educational Center
Christine Jeffries, Vice President, Educational Policies
Matthew Klein, Vice President, Faculty Development
Lance Widman, Vice President, Finance and Special Projects
Chris Wells, Vice President, Legislative Action
Claudia Striepe, Secretary
Lars Kjeseth, Curriculum Chair

A

Abiligou, Peter (1992) Lecturer, Dance
M.F.A. University of California, Los Angeles

Ahmadpour, Ali Reza (2004) Associate Professor, Art
B.S. Pars High Institute
M.A. California State University, Los Angeles

Aitken, Deborah (1987) Lecturer, Music
B.M. University of Southern California
M.A. California State University, Northridge

Alamillo, Lucy (2000) Associate Professor, Art
B.A. University of Northern Iowa
M.A. University of Southern California

Allen, Stacey (1999) Associate Professor, Sociology
B.A. California State University, Long Beach
M.A. California State University, Dominguez Hills

Almos, Carolyn (2010) Lecturer, Theatre
B.F.A. Whitman College
M.F.A. California Institute of the Arts

Anaya, Jose Dean, Community Advancement
B.S. California State Polytechnic University, Pomona
M.B.A. University of Southern California

Anderson, Marilyn (1984) Professor, English
B.A. California State University, Los Angeles
M.A. University of California, Los Angeles
M.A. California State University, Dominguez Hills

Annick, Jennifer A. (2001) Associate Professor, English, Reading
B.A. Fairfield University
M.A. Loyola Marymount University

Ansite, Martha (1998) Associate Professor, English
B.A. University of Southern California
M.A. California State University, Dominguez Hills

Antoine, Ellen R. (1988) Professor, Political Science
B.A. Tulane University
M.A., Ph.D. Johns Hopkins University

Antrim, Craig K. (1974) Lecturer, Art
B.A. University of California, Santa Barbara
M.F.A. Claremont Graduate School

Arce, Francisco M. (2006) Vice-President - Academic Affairs
B.A. California State University, Los Angeles
M.A. University of California, Santa Barbara
Ed.D. University of San Francisco

Arensmeier, Jr., John W. (2000) Lecturer, German
B.A., M.A. California State University, Long Beach
Ph.D. University of Southern California

Armato, Eugene (1989) Professor, English
B.A. University of Pennsylvania
M.A. University of Southern California

Arnold, Mark S. (1991) Lecturer, Administration of Justice
B.S. California State University, Los Angeles
J.D. Southwestern University School of Law, Los Angeles

Awaisiyen, Aida (2003) Lecturer, Mathematics
B.Sc., M.S., Ph.D. University of Baghdad

B

Bachmann, Susan (1988) Professor, English
B.A. Ph.D. State University of New York
M.A. University of Wisconsin

Back, Leslie W. (1978) Professor, Music
B.A. Glassboro State College
M.M.E. Temple University

Baht, Cynthia (1986) Lecturer, Communication Studies
A.A. Golden West College
B.A., M.A. California State University, Long Beach

Baily, Kim (2006) Director, Nursing
Instructor, Nursing
B.S.N. Samuel Merritt College
M.S.N. University of Phoenix
Ph.D. St. George’s Hospital Medical School

B.A. Sanoma State University
M.A., Ph.D. University of California, Los Angeles

Baldwin, Ava (2008) Lecturer, Communication Studies
B.A., M.A. California State University, Long Beach

Ball, Janice C. (2000) Associate Professor, Academic Strategies
B.A. California State University, Dominguez Hills
M.A. Loyola Marymount University

Banks Carson, Sivi (1997) Lecturer, Radiologic Technology
B.S. Tuskegee University

Barba, Jeannine (1988) Lecturer, Communications
B.A. University of Southern California
M.A. California State University, Dominguez Hills

Barber, George A. (1983) Lecturer, Automotive Technology
A.S. El Camino College

A.A. El Camino College
A.S. Long Beach City College

Bartiromo, Sandra (1975) Professor, Sign Language/Interpreter Training
A.A. Pierce College
B.A. California State University, Los Angeles
M.A. Azusa Pacific College

Barton, Dick (1983) Professor, Computer Information Systems
B.A. Illinois College
M.A. Southern Illinois University
Bateman, Michael (2008)  
Instructor, Mathematics  
B.A. University of California, Los Angeles  
M.S. California State University, Long Beach

Bates, Larisa (2009)  
Lecturer, Dance  
B.A. University of Georgia, Athens

Bauer, Maria F. (2001)  
Lecturer, English as a Second Language  
M.A. University of Vienna  
M.A. Johns Hopkins University  
TESOL Certificate - University of California, Los Angeles

Bauman, Robert. (1997)  
Lecturer, Mathematics  
B.A., M.A. University of California, Irvine

Baxtor, Susan (2001)  
Associate Professor, Child Development  
B.A. University of Western, Ontario  
M.Ed. Ontario Institute for Studies in Education, University of Toronto

Bayssa, Beyene (2000)  
Lecturer, Mathematics  
B.S., M.Sc. Addis Ababa University

Beaudoin, Robert E. (1983)  
Professor, Automotive Technology  
Industry experience

Beckett-Lemus, Lynn (2001)  
Associate Professor, Mathematics  
B.A. California State University, Dominguez Hills  
B.A. California State University, Long Beach  
M.S. University of Southern California  
M.S. Claremont Graduate University

Beley, Kate (1997)  
Associate Professor, Counselor  
A.A. El Camino College  
B.A., M.A. California State University, Dominguez Hills

Bellemín, Jeanne (1977)  
Professor, Zoology  
B.S., M.S. California State Polytechnic University, Pomona

Bergerman, Rebecca (2005)  
Associate Professor, English as a Second Language  
B.A., M.A. California State University, Long Beach

Berman, Evelyne (1985)  
Professor, French  
B.A., M.A. University of Grenoble  
M.A., Ph.D. University of California, Los Angeles

Berney, Daniel E. (2001)  
Professor, Dance  
B.A. University of California, Santa Barbara  
M.F.A. University of California, Irvine

Bickford, Susan (2004)  
Associate Professor, Mathematics  
B.A. Syracuse University  
M.A. University of California, Los Angeles  
M.Ed. Arizona State University

Bishop, Francesca (2000)  
Professor, Communication Studies  
A.A. El Camino College  
B.A. University of California, Los Angeles  
M.A. California State University, Fullerton

Bisignano, Dana (2002)  
Lecturer, Music  
B.A. University of California, Los Angeles  
M.A. Eastman School of Music

Blaho, Vicki (1993)  
Lecturer, English as a Second Language  
B.A., M.A. Queens College - New York  
M.A. - TESOL California State University, Los Angeles

Blake, Sara (1986)  
Professor, English  
A.A. Palomar College  
B.A., M.A. San Diego State University

Bliss, Jack (1978)  
Lecturer, Real Estate  
B.S., M.B.A. California State University, Long Beach

Bloomberg, Randall (2008)  
Professor, Mathematics  
B.A. Pratt Institute  
M.F.A. New York Academy of Art

Blount, Richard (1999)  
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A.A., A.S. Pasadena City College
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Professor, Physics
B.S. Universidad Nacional de Mexico
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Lecturer, Photography
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R

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Professor, History
B.A. New School of California
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B.S., M.S. Shiraz University
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Lecturer, English
B.A. Stanford University
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B.A. Creighton University
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A.A. El Camino College
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Professor, Architecture
A.A. El Camino College
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B.A., M.A. University of California, Los Angeles

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B.A. University of California, Santa Barbara
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Roberts, Lois (1989)  
Lecturer, Music  
B.M., M.M. The Juilliard School of Music  

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Lecturer, Communication Studies  
B.A., M.A. California State University, Long Beach  

Robles, Vincent L. (1990)  
Professor, Librarian  
B.A. California State University, Los Angeles  
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Rock, Eugene (1981)  
Lecturer, Cosmetology  
Industry experience  

Rodriguez, Bernardo (1996)  
Lecturer, Automotive Collision Repair/Painting  
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Industry experience  

Rodriguez, Stephanie (1996)  
Dean, Division of Industry and Technology  
B.A., M.A. California State University, Dominguez Hills  
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Lecturer, Fire and Emergency Technology  
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B.S. California State University, Fullerton  
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B.S.N. University of Phoenix  
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Professor, Photography  
B.A., M.Ed. Arizona State University  

Professor, Electronics and Computer Hardware Technology  
A.A. El Camino College  
Industry experience  

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B.S. Northern Arizona University  
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Lecturer, Philosophy  
A.A. M.L. San Antonio College  
B.A. Pitzer College  
M.A. University of Southern California  

Saakian, Lernik (1997)  
Lecturer, Mathematics  
B.S. Armenian State University  
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Sablo, Sabra (2005)  
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A.S. El Camino College  
B.S. Chaminade University of Hawaii  
M.S. California Lutheran University  

Sampson, Allen (1989)  
Professor, Mathematics  
B.A. University of Florida  
M.A. Northwestern University  
M.S. California State University, Hayward  
D.M.A. Stanford University  

Sanchez, Ruth (1995)  
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Sanchez, Virginia (1984)  
Lecturer, Photography  
A.S. Long Beach City College  

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Associate Professor, Dance  
B.A., M.A. University of California, Los Angeles  

Saweris, Nashat (1999)  
Lecturer, Mathematics  
B.S. Assiat University  
M.S. Alexandria University  
M.S., Ph.D. Purdue University  

Scarlet, Ronald A. (1979)  
Professor, Theatre  
A.A. El Camino College  
B.A., M.A. University of California, Los Angeles  

Scharlin, Lester A. (1972)  
Professor, Biology  
B.S. California State University, Long Beach  
M.S. University of California, Los Angeles  

Schlick, David (1996)  
Lecturer, Spanish  
B.A. State University New York at Fredonia  
M.A. California State University, Long Beach  

Schlueter, Rory (1987)  
Lecturer, Computer Information Systems  
B.S. University of California, Los Angeles  

Scheutz, Linda B. (2001)  
Lecturer, Administration of Justice  
Industry experience  

Schulte, Francis J. (1998)  
Lecturer, Philosophy  
A.A. El Camino College  
B.A., M.A. California State University, Dominguez Hills  

Schulz, Patrick (2007)  
Instructor, Music  
B.A. University of Wisconsin - Madison  
M.A. University of Nebraska  
D.M.A. Arizona State University  

Schwartz, Stephanie (2000)  
Professor, Reading  
B.A., M.Ed. University of California, Los Angeles  
M.A. California State University, Long Beach  

Scott, Gregory L. (1989)  
Professor, Computer Science, Mathematics  
B.S., M.S. Washington University of St. Louis  

Seaton, Sharyn (2000)  
Lecturer, History  
B.A., M.A. California State University, Fullerton  

Seifert, Franz (1970)  
Lecturer, Machine Tool Technology  
A.A. Ceritos College  
A.S. Los Angeles Trade Technical College  
B.E. California State University, Long Beach  
Industry experience  

Associate Professor, Construction Technology  
A.A. El Camino College  
B.A. California State University, Long Beach  

Semenoff, Michael (1996)  
Lecturer, Mathematics  
B.F.A. California College of Arts  
B.A. San Francisco State University  
M.S. California State University, Northridge  

Serr, Russell (1996)  
Associate Professor, Adapted Physical Education  
B.A., M.A. California State University, Long Beach  

Seyedin, Aban (1987)  
Professor, Mathematics  
B.S., M.S. Utah State University  

Seyedin, Massood (1986)  
Professor, Mathematics  
B.S. University of Wisconsin  
M.S. University of South Dakota  
Ph.D. Virginia Polytechnic Institute  

Shadish, Elizabeth (1989)  
Professor, Philosophy  
B.A. University of Santa Clara  
M.Ed. College of Notre Dame  
Ph.D. Purdue University  

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Instructor, Nursing  
B.S.N. University of West Florida  
M.S.N. University of South Alabama  

Shamash, Ellis (2000)  
Lecturer, Mathematics  
B.S., M.S., Ph.D. University of California, Los Angeles  
M.S. California State University, Northridge  

Shan, David X. (1991)  
Professor, Japanese, Chinese  
B.A. Fudan University  
M.A. Osaka University  
M.A. Washington University in St. Louis  

Shankweiler, Jean (1988)  
Dean, Natural Sciences  
Professor, Chemistry  
B.S. College of Mount St. Joseph  
Ph.D. New Mexico State University  

Shannon, Dale (1992)  
Lecturer, English as a Second Language  
B.A. Southern Methodist University  
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Sharifi, Amir (1998)  
Lecturer, English as a Second Language  
B.A. Alameh Tabatabai University Complex  
M.A., TESL Certificate California State University, Long Beach  

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Sharma, Kiran (1993)  
Lecturer, Nursing  
A.A. Los Angeles Trade Technical College  
B.S.N. California State University, Long Beach  
M.S.N., F.N.P. California State University, Dominguez Hills

Sharp, Adrienne (1991)  
Professor, English  
B.A. University of California, San Diego  
M.A. Johns Hopkins University  
M.A. University of Southern California

Shaw, Steve (1991)  
Lecturer, Physical Education  
B.A. California State University, Fullerton  
M.S. California State University, Dominguez Hills

Sheil, Sean (1997)  
Lecturer, Physical Education  
B.A. California State University, Stanislaus  
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Lecturer, Music  
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B.A. Ivanovo State University, Ivanovo  
Ph.D. Russian Academy of Sciences, Moscow

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B.S. University of California, Los Angeles  
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Siddiqui, Junaid (2002)  
Associate Professor, Computer Information Systems  
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B.S., M.B.A. University of California, Los Angeles  
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Professor, Respiratory Care  
A.A.S. State University of New York  
B.S. Empire State College  
M. Ed., Ed.D. University of California, Los Angeles

Skipper, John D. (1989)  
Lecturer, Administration of Justice  
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Lecturer, Physics  
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Lecturer, English as a Second Language, Reading  
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Lecturer, Administration of Justice  
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Dean, Counseling and Student Services  
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Professor, Spanish  
B.A. University of California, San Diego  
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Stallings, Michael L. (1981)  
Professor, Architecture  
A.A. El Camino College  
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Professor, Physical Education  
B.A. University of California, Santa Barbara  
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B.A., M.F.A. California State University, Fullerton

Steinberg, Margaret (2004)  
Associate Professor, Anatomy, Physiology  
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Stephens, Kathleen (1992)  
Professor, Nursing  
A.A. El Camino College  
B.S.N. Mount St. Mary’s College  
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Stevens, Christopher M. (2002)  
Lecturer, German  
B.A. University of Oklahoma  
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Stewart, Thomas (1983)  
Lecturer, Chemistry  
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Stillson, Alan (2003)  
Lecturer, Mathematics  
B.A., M.S. Queens College  
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Stockwell, Harry M. (1990)  
Professor, Automotive Technology  
A.S. Rancho Santiago College  
Industry experience

Stohrer, Susan (1996)  
Lecturer, Physical Education  
B.A. Furman University  
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Storms, Harrison (2001)  
Professor, Art  
B.F.A., M.F.A. Otis Art Institute

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B.A. Pacific University  
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Lecturer, Mathematics  
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Lecturer, Art  
B.A. Michigan State  
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Instructional Programs  
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Lecturer, Radiologic Technology  
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Tummers, Susan A.M. (2000)  
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B.S. Loyola Marymount University  
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Associate Professor, English  
A.A. Merrimack College  
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M.A. Northeastern Illinois University  

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Professor, Computer Information Systems  
B.S. University of Wisconsin  
M.S.T. American University  
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Valladares, Daniel (1998)  
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B.A. University of California, Santa Barbara  
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Vertullo, Kathy (2004)  
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Industry experience  

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Walker, Rhonda (1996)  
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A.A. Watson College  
B.A. Murray State University  
M.A. California State University, Northridge  
Industry experience  

Lecturer, Nutrition and Foods  
B.S. Michigan State University  

Lecturer, Fire and Emergency Technology  
A.A. Paloam College  
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Waters, Marianne C (2005)  
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Industry experience  
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Whitney, Karen (2005)  
Associate Professor, Art  
B.A., M.A. Brigham Young University  
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Professor, Political Science  
B.A., M.P.A. University of California, Berkeley  
M.A. Occidental College  
Wietting, John (1988)  
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B.A., M.A. Southern Illinois University  
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Williams, Rachel (2009)  
Instructor, English  
B.A. University of California, Los Angeles  
M.A. University of California, Santa Barbara  
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Associate Professor, Cosmetology  
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Industry experience  
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Lecturer, Nursing  
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M.S.N. University of Phoenix  
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A.A. Golden West College  
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Wozniak, Paul H. (1977)  
Professor, Mathematics  
B.A. Gannon College  
M.A. University of Detroit  
Ph.D. Ohio State University  
Wu, Xiaowen (2000)  
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Wyatt, Karen (1992)  
Lecturer, Physical Education  
A.A. Santa Monica City College  
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Yamashita, Mitsuru (1967)  
Lecturer, Administration of Justice, Physical Education  
B.S. California State University, Long Beach  
Yang, Christie (2000)  
Lecturer, Mathematics  
B.A. Taixan Normal University  
M.S. University of Waterloo  
M.A. University of New Brunswick  
Yankey, Kofi (2002)  
Lecturer, Economics  
B.A., M.A. San Diego State University  
Yee, David (2002)  
Lecturer, Mathematics  
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Lecturer, Japanese  
B.A., M.A., C.Phil. University of California, Los Angeles  
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Professor, Mathematics  
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Ed. M. Harvard University  
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A.A. El Camino College  
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B.A. Hebei University, China  
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Lecturer, English  
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Hazardous Materials Management Certificate - University of California, Davis  
Traffic Accident Reconstruction Certificate - University of California, Riverside  
Lecturer, English  
A.A. Los Angeles Valley College  
A.B., M.A., Ed.D. University of California, Los Angeles  
M.A., California State University, Long Beach  
M.A. California State University, Los Angeles  
Ph.D. University of Southern California  
Professor Emeritus  
The Academic Senate, in consultation with the Vice President - Academic Affairs, will grant Professor Emeritus status after retirement to tenured faculty members in good standing.  
Adams, Rhea R., 1972-1992, Nursing  
Adarkar, Chitra, 1988-2004, Mathematics  
Albert, Joy E., 1988-2002, Dean, Natural Sciences  
Alvidrez, Richard E., 1982-2003, Electronics  
Amling, Joy A., 1985-2010, Business  
Anagnostis, Mary, 1956-1983, Philosophy  
Annis, Beverly H., 1969-1981, English  
Antonioli, James, 1958-1985, English  
Aoto, Shirley, 1980-2002, Accounting  
Arnold, Charles, 1964-1985, English  
Atherton, Elizabeth L., 1971-2003, Art  
Bailey, Nicki, 1969-1994, Physical Education  
Baldwin, E. Joan, 1958-1996, Geology  
Banda-Ralph, Ruth, 2001-2009, Counseling  
Barger, Bill, 1969-1990, Philosophy  
Barth, Melinda, 1979-2009, English  
Beamon, Scelia F., 1967-1992, Nursing  
Beatty, Bruce, 1975-1997, Economics  
Beaumel, Ellen, 1963-1993, Physical Education  
Bilici, Lutchmnia, 1990-2009, Computer Information Systems  
Belcher, Frank, 1956-1986, French  
Beverly, Cheryl L., 1985-2007, Counseling  
Bloch, Joseph, 1959-1988, English  
Bluske, Charles, 1952-1983, Art  
Bonanno, Joseph, 1972-2003, Theatre  
Boxer, Irwin, 1953-1984, Mathematics  
Boyd, Laurelae, 1963-1986, Nursing  
Brady, David K., 1952-1979, English  
Brady, Eva, 1947-1984, Spanish  
Bramstedt, Wayne, 1965-1996, Anthropology  
Brody, Beatrice L., 1974-2004, Counseling  
Brothen, Gerald C., 1974-2010, Geography  
Brown, Bruce, 1963-1997, English  
Brown, Carolyn B., 1975-2006, Music  
Brown, Eleanor, 1967-1977, Nursing  
Brown, Gerald W., 1948-1978, Sociology  
Brown, Lloyd, 1957-1975, History  
Brown, Robert H., 1963-1992, Natural Sciences  
Buck, Stanley, 1956-1985, Electronics  
Campiglia, Jeannette, 1953-1983, Spanish  
Carney, John P., 1959-1982, Political Science  
Castagni, Joseph, 1962-1985, French/Spanish  
Christian, Leo, 1952-1980, Dean, Admissions  
Clarke, Jack, 1978-1993, Electronics  
Coad, Raylene, 1974-1987, Chemistry
Oyama, Jane Y., 1971-2009, Biology
Page, Charles M., 1961-2004, Biology
Patterson, David S., 1971-2004, Art
Pelsinger, Myron, 1957-1987, History
Perry, William E., 1965-1999, German
Pesusich, Doreen J., 1965-1997, Physical Education
Peterson, Warren, 1947-1987, Mathematics
Pfiffner, Virginia, 1952-1984, Dean, Behavioral and Social Sciences
Pielke, Robert G., 1990-2007, Philosophy
Poe, Robert, 1955-1982, Associate Dean, Admissions
Power, Sumner, 1952-1975, Electronics
Prather, Robert W., 1967-1990, Air Conditioning and Refrigeration
Quadhammer, Roger, 1971-2003, Dean, Fine Arts
Riggs, Shirley G., 1973-1990, Librarian
Rhodes, Mary Ann, 1971-1979, Cosmetology
Roberts, Joanne L., 1965-1983, Psychology
Robles, Marisa, 1953-1979, Power Sewing
Rodarm, Katherine, 1961-1980, Physical Education
Rodriguez, George, 1981-2009, Welding
Roney, Raymond, 1984-2001, Dean, Instructional Services
Rood, Hugh L., 1957-1978, Biology
Rozolis, James, 1966-2004, Biology
Savage, Nancy, 1966-1990, English
Scarlett, Norman H., 1949-1981, Behavioral Science
Scarpitta, Yvonne, 1966-1985, Art
Schauman, Sam, 1965-1995, President
Schenk, Joyce, 1986-2005, English
Schindler, Ambrose, 1947-1983, Physical Education
Schwartz, James F., 1975-2005, Dean, Health Sciences and Athletics
Seares, Suzanne, 1966-2001, Physical Education
Seitz, Philip, 1957-1985, Business
Semeraro, Mary, 1966-1993, Physical Education
Shannon, David W., 1979-2005, Physical Education
Shaw, Lester, 1966-1985, Business
Shepard, Paul B., 1961-1997, Philosophy
Silengo, John, 1970-1985, Photography
Skinner, Virginia, 1954-1985, Mathematics
Smith, Anne, 1958-1985, Psychology
Smith, Catherine, 1960-1976, Chemistry
Smith, John D., 1976-1993, Spanish
Southstone, Raymond, 1958-1985, Physical Education
Spearman, Terry, 1990-2006
Academic Strategies, Human Development
Spyr, E. Jean, 1968-1992, Nursing
Stanich, George, 1955-1992, Physical Education
Stauber, Kriss, 1981-2010, Office Administration
Steffey, Lois, 1951-1984, Business
Stephens, Robert C., 1956-1995, Zoology
Stinson, Janet C., 1968-2003, Interior Design
Storer, Thomas W., 1970-2010, Physical Education
Strauch, Ann, 1985-2005, English as a Second Language
Strehlke, Sally F., 1980-2006, Business, Office Administration
Sutch, Patricia J., 1965-2003, English/Reading
Swanson, Herbert, 1961-1979, Behavioral Science
Tanaka, David, 1966-1985, Business
Thompson, Charles, 1958-1985, Business
Thompson, Gerald, 1956-1995, Anatomy
Thompson, Robert, 1950-1983, Economics
Thorsen, Thomas, 1964-1999, Mathematics
Toddy, Homer, 1959-1983, Business
Toth, Alexander S., Jr., 1967-2001, English
Toth, Mary, 1975-1999, Public Health Nurse
Townsend, V. Katherine, 1964-2007, Director of Nursing
Treventhen, Maxine, 1960-1985, Business
Tyo, John, 1979-2008, Reading
Underwood, Grace K., 1975-1999, Psychology
Ursich, Joseph P., 1963 - 1990, Drafting Technology
Vander Steucken, Frances E., 1999-2005, Nursing
Van Lue, Nick, 1991-2009, Physical Education
Vincent, William, 1962-1993, Physical Education
Visintainer, Donald J., 1974-2003, Radiologic Technology
Watanabe, Midori K., 1967-1993, Psychology
Way, Ronald W., 1973-2007, Dean, Industry and Technology
Weir, Deborah, 1977-2006, English as a Second Language
West, Phyllis, 1990-2007, English as a Second Language
Westberg, David, 1986-2009, Mathematics
Wildenberg, Medora, 1980-2007, Art
Williams, Grace M., 1949-1976, Spanish
Wilson, Charles, 1963-1979, Anatomy
Wilson, Stanley F., 1947-1978, Speech Communication
Wilson, Tom, 1950-1985, Physics
Wissman, Frank, 1954-1985, Administration of Justice
Wright, Frieda L., 1967-1987, Nursing
Wrobel, Alfred J., 1956-1997, History
Yee, Martin, 1954-1985, Engineering
Young, A. Robert, 1977-2008, English as a Second Language
Zareski, Susan W., 1969-2008, Nursing
Zuck, Richard, 1976-1999, Chemistry

2010-2011 El Camino College Catalog
Serving: Carson, Compton, Lynwood, North Long Beach, Paramount, and Watts-Willowbrook

**Address**
Compton Community Educational Center
1111 East Artesia Boulevard, Compton, CA 90221-5393

Telephone Number
310-900-1600

**Website**
www.compton.edu
History of El Camino College Compton Center

The former Compton Community College was established in 1927 as a component of the Compton Union High School District. In 1950, voters approved a bond issue separating the college from the high school district. The new college campus was then constructed at the present site. At its peak, student enrollment approached 10,000. After many successful years, and several challenging years, a chain of events eventually led to Compton College District/Compton Community College District agreement is to assist with recovery and full accreditation.

On July 24, 2006, the El Camino Community College District Board of Trustees gave approval for El Camino College to proceed with negotiations for an agreement to provide educational and related support services to residents of the Compton Community College District. In August 2006 the agreement was official, and the El Camino College Compton Educational Center was established. The primary intent of the El Camino Community College District/Compton Community College District agreement is to assist with recovery and full accreditation. El Camino College provides accredited instructional and related support, in addition to administrative services, to meet the needs of Compton students. El Camino College courses are taught at El Camino College Compton Center by Compton faculty.

Administration at Compton Center is led by the Superintendent/President of El Camino College. The Vice President, Compton Center, oversees the daily operations at El Camino College Compton Center.

Through the agreement, residents of the Compton community continue to have access to university transfer and vocational education opportunities, as well as financial aid, basic skills courses and related support services, right in their own neighborhood.

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 (for example: prospective employers) except for those agencies entitled to access under the provisions of the act (for example: 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 November 19, 1974.

Students may request a copy of a record which 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, Enrollment Management.

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.

Spanish Language

Student information in Spanish is available in the Admissions and Records Office.

Admission

Anyone 18 years of age or older qualifies for admission to El Camino College Compton Community Educational Center. If under the age of 18, you will qualify if you have 1) graduated from high school or 2) passed the California High School Certificate of Proficiency Test.

Special Part-Time or Full-Time Students

El Camino College Compton Center may admit as a special part-time or special full-time 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.

Residents of other states and foreign students are subject to out-of-state tuition. AB 540 allows undocumented students who meet specific criteria to pay in-state tuition at California public colleges and universities. AB 540 does not provide access to state or federal financial aid. Students who attend private and parochial schools follow the same residence requirement. Concurrently enrolled 11th and 12th grade students shall receive credit for community college courses which they complete. If credit is used for high school graduation, attention is called to Section 1630, Title 5, California Administrative Code.
Concurrent Enrollment Application forms, which are available in the Admissions and Records Office, must be presented when the student files an application for admission. A separate approval must be provided for each semester, summer session, or winter session in which the student is enrolled. Concurrently enrolled 11th and 12th grade students must comply with all policies, follow all procedures, and meet all requirements by the published deadlines for each semester and/or session.

Residency
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 state or federal financial aid. Students who attend private and parochial schools follow the same residence requirement.

California Residence Requirement
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 state or federal financial aid. Students who attend private and parochial schools follow the same residence requirement.

District Residence Requirements
A student 18 years or older who resides in the Compton Community College District 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. The residence of the student under age 18 is determined by the legal residence of the parents as defined by law.

Exceptions to Residence Determination
A list of exceptions to residence determination will be issued by the Admissions and Records Office to each student who is classified as a “non-resident.” Consideration will be given to appropriate evidence submitted by the student in the active United States military service or who is a dependent of a member of the United States military service. The student should contact the Admissions and Records Office for possible classification as a resident.

Appeal Procedure
Any student, after a final decision on residence clarification, may make written appeal as provided in Title 5, California Administrative Code, within 30 calendar days of notification.

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 defraying the costs of providing these services.

The mandatory general student fee will be collected at the time of registration. Students who fail to pay this required fee at the time of registration will subsequently be dropped from classes. Grades, transcripts and diplomas will be withheld and future registration restricted. The enrollment fee is $26 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 System 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 on 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, this 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 information in the financial aid and scholarship section.

Refund of Enrollment Fee
To receive a refund, students must drop their classes through the online system, MyECC, or in person in the Admissions and Records Office (first two weeks of a semester) or the Bursar’s Office according to dates published in the schedule of classes and on fee receipts.

To receive a refund for a parking permit, students must return the permit to the Bursar’s Office within the time period specified in the class schedule. Refund checks will be mailed before the end of the semester.

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

Those who drop a class that meets fewer than 15 weeks must apply by the end of the first full week of classes.

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

Fee Payment Methods
Personal checks drawn on United States banks only, money orders or cash will be accepted for any fee paid. VISA, Discover, American Express, 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
El Camino College Compton Center students have the option to pay $17 each semester to cover the operation, supervision, programs and services of the Student Health Services at El Camino College.

There are exceptions under these conditions:
- Students receiving financial aid pursuant to Section 72252.1.
- 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.

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. Forms to request a refund may be obtained at the Bursar’s Office.

Compton Center students are not required to pay health fee. All fees are subject to change.
Non-Resident Fee

In addition to the general student fees, an out-of-state United States citizen is charged an out-of-state fee of $183 for every credit unit. A citizen of another country pays a non-resident fee of $213 for every credit unit. 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 and Records 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.

All fees must be paid by checks 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 in the Admissions and Records Office, by telephone, or by the Web according to the following schedule:

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

Refunds for the Summer and Winter sessions and for short-term courses of 8 weeks or less will be granted if classes are dropped according to the following schedule:

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

Photo Identification Card and ASB Stickers

All students are required to obtain a free El Camino College Compton Community Educational Center identification card. These cards are available in the Student Life Office. The hours are Monday through Thursday, 8:00 a.m. to 8:30 p.m. and Friday, 8:00 a.m. to 4:30 p.m.

These cards serve as photo identification, and are required for Library services, campus activities, access to the Learning Resource Center and Open Computer Labs, and to verify attendance in classes.

All students are encouraged to purchase an optional ASB sticker for their photo identification cards during registration or at the Bursar’s Office. The ASB sticker offers a variety of discounts at businesses, theaters, ASB sponsored events, and athletics events. El Camino College Compton Center students can also utilize ASB stickers at El Camino College. Discounts include free admission to all campus athletic events and clothing at the bookstore. Funds generated from the cards help support student activities.

Parking Fee

Students/Visitors wishing to park on campus will pay a $12 fee for the entire semester in accordance with Education Code Section 72247.

Students/Visitors with disabilities who have been issued a DMV Person (DP) placard may park in any student space or faculty/staff space and MUST DISPLAY the DMV disabled person placard/plates AND a valid El Camino College Compton Center semester permit when parked on campus. Failure to display both the disabled placard/plates and the El Camino College Compton Center semester permit will result in the issuance of a citation. Students parking in a marked Disabled stall need to display their DMV placard only. Temporary medical parking arrangements can be made at Campus Police.

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, through the Admissions and Records Office. 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.

E-Mail Accounts and the Portal

Students are required to use their El Camino College assigned e-mail account. This e-mail account is a tool used to communicate with faculty and ECC divisions and for ECC to communicate with students. Student e-mail address is LoginID followed by @mail.eccd.edu. For example:

firstname_lastnamelast4socialsecuritynumbers@elcamino.edu

Students are also encouraged to 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 kiosks. MyECC can be accessed at: www.elcamino.edu; click on MyECC.
Registration Information

Registration Procedure
Each student is required to have an appointment to register before being permitted to register. It is issued by the Admissions and Records Office and indicates the day and hour of registration. It is 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.

Schedule of Classes
Before the registration period for each semester or summer or winter sessions, the college publishes a Schedule of Classes listing the courses offered, general registration procedures and placement and college ability tests. Schedules may be found on the Web.

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

I. Special registration assistance to the handicapped or disadvantaged students as defined by statute for the purpose of providing equalization of education.

II. Students will receive priority registration according to this ranking system and criteria:
A. General registration priority will be awarded as follows:
   1. First priority: continuing students
   2. Second priority: new and re-admit students
B. For fall and spring semesters, the enrollment of continuing students in accordance with priority system established on the basis of these factors:

III. The early enrollment of students who meet one of these guidelines:
A. Instruction program requires time off campus limiting the choice of class periods on campus.
B. The instructional activity requires a block of time associated with scheduled classes for such activities as practice, meetings, counseling and off-campus travel.
C. First semester F-1 visa student.

Fees at a Glance

<table>
<thead>
<tr>
<th>Fee</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrollment Fee</td>
<td>$26 per unit</td>
</tr>
<tr>
<td>Parking Fee - Car</td>
<td>$12 for each semester</td>
</tr>
<tr>
<td>Health Fee</td>
<td>$17 for each semester (optional for Compton Center students)</td>
</tr>
<tr>
<td>Out-of-state Fee</td>
<td>$190 per unit plus the enrollment fee</td>
</tr>
<tr>
<td>Out-of-country Fee</td>
<td>$221 per unit plus the enrollment fee</td>
</tr>
<tr>
<td>F-1 Visa Student Health Insurance</td>
<td>$396 per semester (subject to change)</td>
</tr>
<tr>
<td>Auditing</td>
<td>$15 per unit</td>
</tr>
<tr>
<td>Credit by Examination</td>
<td>$26 per unit</td>
</tr>
<tr>
<td>Transcripts</td>
<td>First two free; $5 for each thereafter; $8 for emergency</td>
</tr>
<tr>
<td>College Catalog</td>
<td>$5 in Bookstore, $7 by U.S. Mail</td>
</tr>
<tr>
<td>ASB Activity/Discount Sticker</td>
<td>$10 per semester</td>
</tr>
<tr>
<td>Student Representation Fee</td>
<td>50¢ per semester (required)</td>
</tr>
</tbody>
</table>

Fees: You are liable for all fees unless you drop the class by the refund deadline date.

Fees are due within 7 days of phone or Web registration.

Walk-In Registrants: Fees are due at time of registration.

Bursar’s Office (C-36) Hours:
Monday, Tuesday, Thursday, 8:00 a.m. to 4:00 p.m.
Wednesday, 8:00 a.m. to 6:30 p.m.
Friday, 8:00 a.m. to 1:00 p.m.

First Two Weeks of the Semester Hours:
Monday to Thursday, 8:00 a.m. to 6:30 p.m.
Friday, 8:00 a.m. to 4:00 p.m.
Continuous Enrollment for Priority Registration
Continuous enrollment at El Camino College and Compton Center constitutes enrollment in the most recent previous semester per academic year, excluding summer and winter sessions. A student must remain enrolled in at least one course for sufficient time to receive a grade of "W."

Unit Limitations
The student’s program of studies will vary according to individual need and objectives. There is no minimum but the maximum 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 six-week summer session is 8 units or 9 units for the eight-week session 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.

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 per week in 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 7 units or less each semester.

Continued...

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 the California Code of Regulations, Subchapter 3, Section 55220, if a student participates in a voluntary field trip or excursion, the student has deemed to have held 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.

Matriculation
Matriculation is an on-going process which will help you attain success and achieve your educational goals. The matriculation process is designed to help you match your interests, abilities, needs, and goals with the college's courses, programs, and services.

Matriculation services are intended to help you make informed decisions as you develop your educational plan. El Camino College Compton Community Educational Center supports your educational development and recognizes your worth as an individual through matriculation and related services.

You are expected to participate in the matriculation process. Participation provides you with information about and referrals to programs and services that will contribute to your success.

Four Steps to Matriculation

Step 1: File your college application for admission and declare one of these goals:
- Transfer to a university without an associate degree
- Associate degree and transfer to a university
- Associate degree in a vocational program
- Associate degree in a general education program
- Certificate in a vocational program

Step 2: Participate in assessment for educational planning.
Assessment is based on multiple measures, including placement tests. Take appropriate placement tests and consult with an academic counselor about your educational needs, career interests, aptitudes, and other pertinent information to complete your initial assessment. Placement testing is available in the Assessment Center. English, ESL, and mathematics assessment should be completed before you attempt to register in classes.

You must have transcripts or grade slips from all colleges attended before you make a counseling appointment. 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 for assessment. Official transcripts must be mailed from your high school, college, or university to the Records Office.

Step 3: Participate in the New Student Orientation to El Camino College Compton Center. Orientation is offered in conjunction with registration and assessment. A new student must attend an orientation to receive results. The new student orientation will advise you about your educational options and provide important guidance for achieving your goals.

Step 4: Prepare an educational plan with a counselor.
You must meet with your counselor at least once a year as part of your matriculation process. During this meeting, you will complete a written educational plan which is a list of recommended courses to take to reach your educational goal. Any concerns regarding the matriculation process may be addressed with the Dean of Student Services. 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 you do not wish to matriculate, you will nonetheless be provided full access to services and classes at El Camino College and Compton Center. As a general admission student, you will not be required to complete the matriculation process.

Orientation
All students are encouraged to participate in orientation so as to become familiar with the college and its resources. Special orientation sessions are arranged for high school students through their high schools and for special program students such as EOP&S, Financial Aid, students with a disability, athletes and international students. In addition, students are encouraged to enroll in a human development course.

Assessment/Testing
Assessment/Testing Procedures
Personal identification with a photograph and your El Camino College Compton Center I.D. number are required to take tests and receive results.

For more testing information call 310-900-1600, ext. 2830. You must have an application on file prior to any testing. Testing should be completed as soon as possible after you file your admission application. Read the catalog description of classes which interest you to learn if there is any testing recommended or needed. Keep in mind that all placement tests are part of the multiple measures of the assessment process. Be sure to take testing results with you when you go for your academic advisement or educational planning sessions.

English Placement Test - Complete your English Placement Test at least one day before you attempt to enroll into both English courses, which has a course level as a prerequisite, co-requisite or recommended preparation. You may not repeat the English Placement Test once you have enrolled into both English course sequences. If you require further review of your placement recommendation, obtain appropriate forms in the Assessment/Testing Office.

English as a Second Language Placement Test - Complete your English as a Second Language (ESL) Placement Test at least one day before you attempt to enroll into any ESL course, which has a course level as a prerequisite, co-requisite or recommended preparation. The test is comprised of a computerized reading test (20 questions), a writing sample, and a five minute oral interview. If you require further review of your placement recommendation, you should see the ESL coordinator in the Assessment/Testing Office.

Mathematics Placement Test - The Mathematics Placement Test is required of any student who wishes to enroll in any Mathematics class. High school math courses may not be used, per se, for placement into El Camino College Compton Center math courses. However, they may be used in combination with testing for placement assessment, which must be completed before your registration date. Math placement results will be valid for two years. Once you begin the mathematics course sequence, you may not repeat the placement test and must take all courses in sequence.

Specialized Tests
Chemistry Placement Test - The Chemistry Placement Test is required of any student who wishes to enroll in Chemistry 1A unless the student has completed Chemistry 4 at El Camino College Compton Center with a grade of C or better. Previous chemistry course work, whether taken in high school or another college, does not in itself qualify a student for Chemistry 1A. Students who have never taken a chemistry course or who want a beginning level course may enroll in Chemistry 4, 20, or 21A depending upon their majors and completion of mathematics prerequisites. The Chemistry Placement Test may be taken only once and may not be
taken if a student has enrolled in Chemistry 4 at any time. If you require further review of your placement recommendation, obtain the appropriate petition form in the Assessment/Testing Office.

Mathematics Competency Test - This test covers intermediate algebra. If passed, this 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 test, you will first need to file your El Camino College application in Admissions or online. For testing, you will need a photo I.D. and your El Camino College I.D. number. Information and appropriate petition forms for limited re-testing are available in the Assessment/Testing Center.

Waiver Exam for the Associate Degree - A waiver exam is available for Contemporary Health. Contact the Assessment/Testing Office for further information.

After you receive your test results, a further review of your placement recommendation may be requested. Information is available from the Assessment Center.

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 will be 15.

Students who plan to transfer are advised that the specific transfer institution will determine unit and course credit for AP exams. 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.

Art Examination (History of Art):
  Art 2 [3 units];
  Art 3 [3 units]

Biology Examination:
  Biology 10 [4 units]

Chemistry Examination:
  Chemistry 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:
  Computer Science 1 [4 units] - Score 4 or 5 on Computer Science A Examination, or 3 or 4 on AB Examination
  Computer Science 1 and 2 [9 units] - Score of 5 on Computer Science AB Examination

English Examination (Language and Composition):
  English 1A [4 units] - Score of 3 or 4
  English 1A and English 1B [7 units] - Score of 5

English Examination (Literature and Composition):
  English 1A [4 units] or
  English 1B [3 units] - Score of 3 or 4
  English 1A and English 1B [7 units] - Score of 5

Economics Examination (Microeconomics):
  Economics 2 [3 units]

Economics Examination (Macroeconomics):
  Economics 1 [3 units]

Foreign Language Examination:
  Two consecutive courses for a total of 8 units

Government and Politics Examination
(American and California):
  Political Science 1 [3 units]

Government and Politics Examination (Comparative):
  Political Science 2 [3 units]

History Examination (American and European):
  History 101-102 [6 units]
  History 140 [3 units]

Mathematics Examination:
  Mathematics 150 [4 units] - Score of 4 or 5 on Statistics Examination
  (Note: Students are advised that some universities may not accept an AP score in lieu of Mathematics 150. Please see a counselor for further information.)
  Mathematics 190 [5 units] - Score of 4 or 5 on Calculus A-B Examination
  (Note: Students placed in Mathematics 191 and upon completion of that course with grade of C or better will be granted credit for Mathematics 190.)
  Mathematics 190 [5 units] - Score of 3 on Calculus BC Examination
  Mathematics 190 & 191 [9 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 associate degree, IGETC [Area 2] and CSU General education [Area B4] mathematics requirements.)

Physics Examination:
  Physics 2A [4 units] - Score of 5 on Physics B Examination
  Physics 1A [4 units] - Score of 5 on Physics C Examination

Psychology Examination:
  Psychology 5 [3 units]

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

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 students who were unable to enroll at the time of registration. 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 may result in a ’W’ and may subject the student for any and all fees associated with the class.

Attendance Without Official Enrollment

Students will not be permitted to attend classes in which they are not enrolled. Exceptions may be allowed by the instructor for bonafide 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.
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 the class exceed 10% 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 still be retained on the course roster and receive a failing grade. Students may view their registration status using the college’s website.

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.

Withdrawal from Class
Official withdrawal from class must be processed through the online system in the Admissions and Records Office. 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.

Acceptance of Credit
(refer to page 13)

Audit of Courses
(refer to page 13)

Courses Eligible for Credit by Examination
(refer to page 12-13)

Credit by Examination
Board Policy 4235
(refer to page 12)

Credit for Military Service
(refer to page 13)

F-1 Visa Procedure
(refer to page 13-14)

Independent Study
Board Policy 4228
(refer to page 11)

Limitation to Remedial Coursework
Board Policy 4115
(refer to page 17)

El Camino College Student Rights and Responsibilities
Student Rights and Responsibilities are outlined in Board Policy 5506. This policy, which is accessible at offices throughout the college, states that students have rights and responsibilities as provided for in law, including the State Education Code and the Title 5 Matriculation regulations; Board policies, including the Student Code of Conduct; and health and safety considerations.

Discrimination/Sexual Harassment Complaints
El Camino College is committed to providing equal opportunity in education and employment. The college affirms its policy to provide fair and equitable treatment of students and employees and to prohibit discrimination on the basis of ethnic group identification, national origin, religion, age, sex [harassment], race, color, ancestry, sexual orientation, physical or mental disability, or retaliation.

Students or employees with questions, concerns or complaints of discrimination may contact and/or file an official complaint with the offices or agencies listed below to initiate an El Camino College discrimination investigation.

It is the policy (Board Policy 1600) of the El Camino Community College District to encourage full inclusion in all programs and services. Accommodations and alternative formats are available upon request by calling 310-900-1600, extension 2023.

In compliance with Board Policy 1600, a screen-reader friendly copy of this document may be found at www.elcamino.edu and/or a copy of this document in alternative formats is available upon request by calling 310-660-3406.

Quejas de discriminación o acoso sexual
El Camino College está comprometido a brindar igualdad de oportunidades de empleo y educación. Esta institución reitera su política de proveer un trato justo y equitativo a los estudiantes y empleados, y prohibir la discriminación basada en raza, color, descendencia, religión, sexo [acoso sexual], origen nacional [incluyendo limitaciones de idioma] edad, incapacidad (mental o física) incluyendo VIH y SIDA, condición médica (cáncer o características genéticas) estado civil, orientación sexual, estado de veterano, y negación de licencia o acomodación razonable por maternidad.

Los estudiantes y empleados con preguntas, dudas o quejas de discriminación pueden comunicarse y/o presentar una queja oficialmente en las oficinas o agencias que se nombran a continuación, para iniciar una investigación de discriminación por parte de El Camino College.

La política de la Mesa Directiva del Distrito de El Camino College (Regla 1600 de la Mesa Directiva) es promover inclusión completa en todos los programas y servicios. Acomodación y servicios alternativos están disponibles para estudiantes que los requieran llamando al 310-900-1600, extensión 2023.

De acuerdo con la Regla 1600 de la Mesa Directiva, una copia de este documento, fácil de leer, está disponible en www.elcamino.edu o se puede obtener una copia de este documento llamando al 310-660-3406.

Students/Employees: You may file an official complaint with the appropriate offices or agencies to initiate an El Camino College discrimination investigation:
- El Camino College Compton Center Equal Employment Officer-Ms. Rachelle Sasser, Dean, Human Resources 310-900-1600, 2140
- System Office - Mr. Steven Bruckman, General Counsel, California Community Colleges, 1102 Q Street, Sacramento, CA 95814-6511 [Students/Employees]
- U.S. Department of Education, Office for Civil Rights, Old Federal Building 50 United Nations Plaza, Room 239, San Francisco, CA 94102 (Students)
- California Department of Fair Employment and Housing, 611 W. Sixth Street, Suite 1600, Los Angeles, CA 90017-3116 [Students/Employees]
- U.S. Equal Employment Opportunity Commission, 255 E. Temple Street, 4th Floor, Los Angeles, CA 90012 [Students/Employees]
Sexual Harassment Policy

It is the policy of the El Camino Community College District to provide an educational, employment, and business environment free of unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct or communications constituting sexual harassment as defined and otherwise prohibited by state and federal statutes. Within the El Camino Community College District, sexual harassment is prohibited regardless of the status and/or relationships the affected parties may have.


Sexual harassment complaint forms are available in the Office of the Director of Staff and Student Diversity.

Sexual harassment shall be immediately reported to the El Camino College Compton Center Dean of Human Resources or designee, or to any dean, director, or manager for immediate reporting to the District’s Director of Staff and Student Diversity.

Student Services

Welcome Center

The Welcome Center at El Camino College Compton Center is a collaborative effort that is supported by both academic and student affairs. The Welcome Center maintains a student-first philosophy to assist students as they transition to college. The Welcome Center offers a wide array of student services designed to accommodate their needs in a one-stop location that promotes student success and retention in a nurturing and welcoming environment.

The Welcome Center operates campus tours and presentations for prospective students. The Welcome Center provides students with general information regarding college programs, access to computers, services and course information, office hours and locations, and directions to and within El Camino College Compton Center. It also provides students with quick access to academic schedules, registration forms, and various campus publications such as the catalog, schedule of classes, student handbook, and maps.

All visitors are encouraged to stop by the Welcome Center to pick up a map and information about the academic opportunities and social activities available for students and members of the community.

For more information about the Welcome Center, please call 310-900-1600, extension 2765, outreach@compton.edu or visit Room D28.

Bookstore Services

The El Camino College Compton Center Bookstore is located between the Student Life Office and the Cafeteria. The Bookstore is open 9 a.m. to 4 p.m. Monday, Tuesday and Wednesday, and Thursday from 11:00 a.m. to 6:00 p.m. throughout the majority of each semester. During the first two weeks of the fall and spring semesters and the first week of short-term sessions, the Bookstore will be open for extended hours. Information on Bookstore hours can be obtained at the Student Life Office [R-61].

The Bookstore accepts Visa, MasterCard and Discover. Personal checks are accepted for the amount of purchase, dated for the date of purchase and presented by the account holder only; no parental or third-party checks accepted. Students are responsible for following the refund policy, found at the Bookstore and in the Student Life Office.

The Bookstore conducts Textbook Buyback during the first and last week of the fall and spring semesters. Students can receive up to 50 percent of the purchase price if the textbook has been requested for a future semester; the book is not sold as new-only (fill-in or perforated pages); and the Bookstore is in need of additional copies.

Bursar’s Office

The Bursar’s Office is located in C-36 and is typically open from 8:00 a.m. to 4:00 p.m. on Monday, Tuesday, Thursday; from 8:00 a.m. to 6:30 p.m. on Wednesday; and from 8:00 a.m. to 1:00 p.m. on Friday. Students may pay fees, obtain class printouts, and buy discounted theater tickets at the Bursar’s Office.

Counseling Services

Counseling services are made available to students through scheduled appointments. Appointments to meet with a counselor must be made one week in advance through the Counseling Department, located in the Administration Building. A student who has selected a major field of study is strongly encouraged to see one of the counselors assigned to that field; an undeclared or undecided student may see any counselor.

As an integral part of the matriculation program, counseling services are particularly intended to assist students in clarifying career and life goals and in developing an appropriate course of study based on a student’s goals, aptitudes and interests.

Drop-in advisement is normally available Monday through Thursday from 8:00 a.m. to 6:30 p.m. and Fridays from 8:00 a.m. to 12:30 p.m. for students who have questions which do not require transcript review. The drop-in advisement schedule is subject to change based on counselor availability.

Career Center and Job Placement Support Services

Career Center

El Camino College Compton Center has a comprehensive Career Development Center that is responsive to the needs of students and the community. The Career Center, located in the Ralph C. Dills Vocational Technology building, assists students in choosing educational and career objectives commensurate with their interests and abilities, provides opportunities and services necessary to achieve personal and academic goals, and provides information relative to a wide range of services and educational opportunities that may be pertinent to educational objectives. Services include academic counseling, career/vocational counseling, career exploration/assessment and program planning. The Career Center houses a comprehensive career library and offers seminars and workshops on a variety of topics pertaining to personal, professional, and student life.

Job Placement Support Services

The Job Placement Office is located in the Vocational Technology Center Building, Room 109. This office provides employment services at no cost to all students and alumni of El Camino College Compton Community Educational Center. On a daily basis, a variety of full-time and part-time employment opportunities are available. An Employment Development Specialist provides an effective link between employers and students who seek employment while attending classes, as well as career opportunities upon graduation. Additionally, students can access job search options through the virtual job placement service link located on the Compton Center website under “Student Services.” Click on Career Center/Job Placement Services to browse career and job search engines.

The Job Placement Office conducts weekly pre-employment preparation workshops, personal presentation improvement seminars, resume development assistance, and employer recruitment visitations to the campus. The Job Placement Office coordinates an annual Spring Employment/Career Expo where students are introduced to career options. The Job Placement Office abides by Affirmative Action and Equal Employment Opportunity Guidelines.
For more information on the Career Center and Job Placement Support Services, please call 310-900-1600, extension 2788 or visit Room 109, first floor at the Vocational Technology building.

**CalWORKs/TANF/GAIN**

The CalWORKs Program offers a wide array of services to parents who are receiving Temporary Assistance for Needy Families (TANF) and those in transition from welfare to long-term self-sufficiency. Services provided include child care assistance, book vouchers, education and career counseling, work/study, employment retention skills, job development, job placement, and mediation within the Department of Public Social Services. Office hours for the CalWORKs Program are Monday, Tuesday, Thursday 8:00 a.m. to 5:00 p.m., Wednesday 8:00 a.m. to 6:30 p.m. and Friday 8:00 a.m. to 12:30 p.m. Students can be seen by appointment or during drop-in hours. For more information, please visit the CalWORKs Office in the Vocational Technology Building or call 310-900-1600, extension 2072.

**Abel B. Sykes, Jr. Child Development Center**

The Abel B. Sykes, Jr. Child Development Center accepts applications for enrollment of infants, toddlers, preschool and school-age children. If you are a student and/or working parent you may be eligible for FREE or low-cost child care. For additional information about the Abel B. Sykes, Jr. Child Development Center, please call 310-900-1600, extension 2902 or visit the office, in Building T behind the Bookstore.

**Extended Opportunity Programs and Services (EOP&S)**

EOP&S is a state-funded program designed to recruit potential eligible students, facilitate their admission, and increase the retention and success rates of participating students. EOP&S seeks to equalize educational opportunity and make higher education a reality for sectors of our society that have traditionally been excluded, including economically disadvantaged groups. It is the responsibility of EOP&S to help students grow and discover their unlimited potential. These goals are accomplished by providing a series of support services which include: academic and personal counseling, priority registration, computerized book services, tutoring, student enhancement workshops, transfer assistance, transfer fee waivers, transportation assistance, incentive awards, and the Summer Readiness Program.

To apply for EOP&S, students must be a resident of California, qualify for a Board of Governors Fee Waiver A or B, or C with zero EFC, have an educational goal of an associate degree, certification, or transfer to a four-year institution, and be academically disadvantaged. Students are strongly encouraged to apply for all federal and state financial assistance in the Financial Aid Office located in E-12. Income criteria are applied to the EOP&S admission selection process to ensure that students from low-income families are given priority consideration. Students are placed on EOP&S on a first-come, first-served basis. Continuing students, however, retain priority placement for the duration of their participation in the program. Each semester new students are added based on availability of spaces and receive special assistance through the summer readiness program.

**Unit Load**

Students participating in EOP&S are required to enroll in, and maintain, at least full-time status (12 units or more per semester) and a grade point average of no less than 2.0 (a “C” average) for the duration of their participation in the program. Students who do not perform to this level are placed on probation and receive close monitoring from program personnel. Exculminating circumstances will be considered where documentation is provided and continued participation will be granted, if applicable.

**Maximum EOP&S Eligibility**

Title 5 Regulations limit student eligibility to participate in the EOP&S program to the completion of 70 degree applicable credit units of instruction or six consecutive semesters (fall - spring) of enrollment while in the program, whichever is achieved first. Exceptions are made for students enrolled in majors that require several pre-requisites prior to entering the program.

**First Year Experience (FYE)**

The First Year Experience program is designed to help students be successful in their first year of college life by providing a supportive, caring environment of educational and career services. For more information about the FYE Program, please call 310-900-1600, extension 2764.

**Learning Resources Center (LRC)**

The Learning Resources Center (LRC) is open to all currently enrolled El Camino College Compton Center students. The LRC includes the Open Lab and the LRC Tutorial Program. The hours are Monday through Thursday, 8:00 a.m. to 8:00 p.m., Friday, 8:00 a.m. to 4:00 p.m., and Saturday, 8:00 a.m. to 2:00 p.m. The LRC houses an extensive media collection to supplement instruction in many disciplines. The LRC and other open computer labs (Math and Science and Vocational/Technology) provide individualized computer-assisted instruction in reading and math. The LRC Tutorial Program offers free drop-in tutoring for over 40 subjects.

**Library**

The Library is open Monday through Thursday, 8:00 a.m. to 8:00 p.m., Friday 8:00 a.m. to 4:00 p.m. and Saturday 8:00 a.m. to 2:00 p.m. The Library is closed on Sundays and holidays. The collection includes books, periodicals, and over a dozen online computer databases. A campus photo ID is required to check materials out of the library and for use of the computers in the facility. The Textbook Collection provides materials for use within the library. For additional information call the El Camino College Compton Center Library at 310-900-1600, extension 2175.

**Special Resource Center**

The Special Resource Center (SRC) is located in F-10 and provides special assistance for students with disabilities such as, but not limited to, orthopedically and other health impaired, visually impaired, deaf and hard of hearing, and learning disabled students.

El Camino College Compton Community Educational Center recognizes its responsibility to provide an equal opportunity for education for all students. The college's facilities, courses and programs are designed to accommodate the special needs of students with disabilities and, therefore, adheres to these principles:

1. No one may be excluded from any course of study because of a disability.
2. All classes are in architecturally accessible facilities.
3. Curriculum requirements may be modified in certain cases to provide appropriate accommodations and to ensure full participation by students with disabilities.
4. Alternate methods of testing and evaluation are available in all courses offered by the college for students who need such methods.

The student with a disability 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 an attendant.
2. The ability to take care of personal needs (feeding, toileting) unassisted or to provide one's own attendant care.
3. The possession of a stable level of health to benefit from a full semester’s work.

Medical verification of a disabling condition of 45 days or more must be provided for a student to be eligible for a variety of support services. Support services are provided on an individual basis. These services may include: special registration assistance; educational development courses and individualized educational plans; academic counseling, vocational counseling; educational and diagnostic assessment; sign language and oral interpreting; Braille transcribing; mobility assistance in classes; special tutorial assistance; parking permits; equipment loans; orientation training; on and off campus referral services.

Special classes are available with curriculum designed to provide specialized instruction for various types of disabilities and learning styles. These special classes are listed in the catalog under the section of Educational Development. Some of the courses offered include: Personal Assessment; Career Preparation; Increased Learning Performance; Adapted Computer Literacy; Grammar Skills for the Deaf and Hard of Hearing; Reading/Writing Skills for Students with Learning Differences; Psychology of Affective Learning.

The Special Resource Center works with students who have learning disabilities. These are students who have average or above average intellectual ability however, processing difficulties cause a discrepancy between the student’s potential and academic performance.

Services for students with learning disabilities may include assessment, development of individualized educational plans, accommodations, academic support groups, priority registration, counseling and specialized courses.

The office also maintains a liaison with the California State Department of Rehabilitation (DR) for students under their sponsorship. For additional information, please call the El Camino College Compton Center Special Resource Center, 310-900-1600, extension 2403.

Assessment Center

The Assessment Center is located in D26. English, ESL and Mathematics placement testing is 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, and Mathematics Placement Tests, the Assessment Center also administers the following tests: Ability-to-Benefit, Chemistry Placement Test, and Mathematics Competency Test. For additional information, please call the El Camino College Compton Center Assessment Center, 310-900-1600, extension 2830.

Athletics

The Compton Tartar Athletics Program is a member of the South Coast Athletic Conference and the American Mountain Conference. Intercollegiate competition is offered in baseball, basketball, cross country, football, track, soccer, and badminton.

For more information on our athletics programs, please call 310-900-1600, extension 2949 or visit Building W.

Transfer Services

Transfer Services, are offered Monday, Tuesday, Thursday from 8:00 a.m. to 5:00 p.m., Wednesday from 8:00 p.m. to 6:30 p.m. and on Friday from 8:00 a.m. to 12:30 p.m. in D29. Transfer Services offer a wide range of 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 services offered include university fairs on the El Camino College Compton Center campus and frequent field trips to an array of major universities. A calendar of activities is published monthly and is widely distributed. A transfer guide is published each semester. Also, information about public and private colleges and universities is available through Transfer Services. For more information about the Transfer Center, please call 310-900-1600, extension 2764 or visit the office in D29.

Student Support Services Program (TRIO)

The Student Support Services Program is a federally funded program designed to: 1) increase college retention and graduation rates for eligible students; 2) increase the transfer rates of eligible students to four-year colleges/universities; and 3) foster an institutional climate supportive of the success of low income students, first generation students, and college students with disabilities.

The services provided include Priority Registration; Counseling, Computer Lab; Tutorial Assistance; Study Groups; Transfer Assistance; Informational and Cultural Awareness/Appreciation Workshops; and Assistance in applying for Financial Aid Online; Scholarship Information; Grant Aid is provided to eligible SS participants who are receiving Federal Pell Grants.

To be eligible for the program, students must be:

- a U.S. citizen or permanent resident;
- enrolled full time (12 units);
- have an educational goal to graduate with an Associate Degree and/or transfer to a four-year college or university;
- have an academic need;
- and meet the Federal Low Income criteria.

We also accept students who are first-generation college students (parents do not have a bachelor’s degree), and students with disabilities. Documentation is required if you have a diagnosed physical or mental impairment/health condition.

Income documentation is required for an application to be complete. This documentation is in accordance with federal financial aid regulations.

Applications will be accepted at the beginning of each Fall semester. For more information about the Student Support Services Program, please call 310-900-1600, extension 2052 or visit the office in D29.

Veterans Services

The Veterans Office, located in the Administration, helps students obtain information for the collection of veterans educational benefits and provides information on educational and counseling services. An application for program of education may be obtained in the office of Enrollment Services. The completed application along with copies of the service separation form (DD-214) should be submitted to the veterans office. A person who is eligible for veterans benefits and who wishes to use them at El Camino College Compton Center should make an appointment to see the Veterans Representative. Before Compton Center will certify enrollment to the VA, it is essential for students to make appointments with a counselor to have an Individual Education Plan completed. Only courses listed on the Plan will be certified for VA payment. Veterans and eligible dependents will be certified for benefits only after all transcripts of previous work from other institutions are on file. All veterans and eligible dependents must see an academic counselor to select a major and prepare an education plan which includes units completed and courses needed to complete an educational goal. To make an appointment to see the counselor, call 310-900-1600 extension 2076.
Status
Enrollment is verified within one of the following classifications:

Regular College Year
Full-time: 12 or more units
Three-fourths time: 9 to 11 1/2 units
Half-time: 6 to 8 1/2 units

Summer Session
Summer session varies in length and units. Veterans should check with the VA Office.

El Camino College Compton Center considers veterans and eligible dependents the same as all other students in regard to attendance and academic requirements.

If it is necessary to add a course, drop a course or withdraw from classes, the student must inform the Veterans Office and file the necessary form with the Records Office. When notified, the veterans’ clerk will send a Change in Student Status Form (VA form 22-1999B) to the Veterans’ Administration.

Repayment of Benefits
A veteran or eligible dependent who receives a grade of "W" in units for which he or she has received VA benefits may be required to repay all money received for those units. A reduction to less than six units may require the student to repay all money received for the semester.

Advance Payment
Public Law 92-540 provides that an advanced educational assistance allowance may be paid. Contact the veterans’ clerk for details.

Writing Center
The Writing Center, located in F-33, provides drop-in tutoring services for students who are in need of assistance with writing assignments and are enrolled in English composition or other classes.

The center is staffed by qualified writing specialists who assist students on a one-to-one basis. Students must bring their El Camino College I.D. number as well as their course assignment in order to be assisted.

The hours are Monday through Thursday, 8:00 a.m. to 8:00 p.m., and Friday, 8:00 a.m. to 12:00 p.m.

Distance Education
Many courses offered at El Camino College Compton Community Educational Center may be taken through the Distance Education program. Telecourses, two-way interactive courses via video, and online courses via computer are offered. Distance Education courses are ideal for students who need a flexible class schedule because most of the course work may be completed off campus. For some courses, a limited number of on-campus class sessions are required. Other courses may be taken entirely online.

Students may register for Distance Education courses through the Admissions Office during regular registration. For further information, stop in the Distance Education Office located in the Vocational Technology Center, Office 117 or call 310-900-1600, extension 2784. Office hours during a regular semester are Monday through Thursday, 12:00 p.m. to 8:30 p.m. and Fridays, 8:00 a.m. to 4:30 p.m. Office hours during the summer session are Monday through Thursday, 8:00 a.m. to 6:30 p.m.

Student Development
The Student Life Office serves as headquarters for all student organizations.

The Student Life Office, is usually open Mondays through Thursdays from 8:00 a.m. to 8:30 p.m. and Fridays from 8:00 a.m. to 4:30 p.m., offers a social atmosphere where students may meet and mingle or study between classes. The building is headquarters for Associated Students, clubs, organizations, and all related activities.

Everyone who is registered at El Camino College is a member of the Associated Students. Officers of the organization are elected each year. Associated Students sponsors programs and services to benefit the entire student body.

Government
El Camino College Compton Center students have ample opportunity for self-government, self-direction, and participation in the governance of the college. A student council, composed of officers elected each year, determines how the student service fees will be used, coordinates student activities on campus, transacts student business, and represents student views on issues of current importance at Compton Center. Through student government, students serve on committees and represent the student body at area and state student government conferences each semester. The council meets weekly, and all meetings are open to members of the student body.

A copy of the constitution of the Associated Student Body, which governs the associated student body operations, may be obtained in the Student Life Office.

Student Organizations
Student organizations offer an extensive program of activities and provide opportunities for active involvement in campus and community life. Student government groups offer experience in the democratic processes, the skills and responsibilities of citizenship, and participation in the governance of Compton Center. Clubs centering on special student interests, hobbies and skills offer opportunities for personal growth and development.

Students are encouraged to plan and organize their own programs and events with the help of faculty and staff members acting as advisors and consultants. All student groups are governed by their constitutions, the interclub council constitution, and general guidelines. Copies of constitutions and guidelines are available in the Student Life Office.

All student organizations are open to qualified students, regardless of race, religion, or national origin. It is hoped that every student will participate in at least one activity in addition to his/her regular class work. There are numerous active organizations on campus.

The following clubs are active or can be available to students through petitioning student life and the associated student council for reactivation:

Special interest clubs and organizations are: Alpha Gamma Sigma [Tau Chapter], Black Student Union, California Nurses Student Association, Christian Club/More than Conquerors, Disabled Students Association, EOP&S Student Organization, International Students Organization, Latino-American Students Organization, Chess Club, Psychology Club, Psi Beta [National Psychology Honor Society], Chi Eta Phi, and Phi Beta Lambda (Future Business Leaders of America).

Additional groups can be organized by petitioning student life and the associated student council for authorization to become new clubs on campus.

2010-2011 El Camino College Catalog
Financial Aid

Financial Aid Office
Room E12, 310-900-1600, extension 2935

Hours:
Monday, Tuesday, Thursday: 8:00 a.m. to 5:00 p.m.
Wednesday: 8:00 a.m. to 6:00 p.m.
Friday: 8:00 a.m. to 12:00 p.m.

[Please see the current course schedule for any changes]

The purpose of the Financial Aid Office at El Camino College Compton Center is to assist students who have the ability to benefit from postsecondary instruction and who, without financial support, otherwise would be unable to attend this college. Students should go to the Financial Aid Office to apply for financial assistance, or online at: www.compton.edu/studentservices/financialaid/index.aspx

Financial Assistance
El Camino College Compton Community Educational Center provides extensive services to help students meet the costs of attendance. The Financial Aid Office provides information regarding financial assistance available to students in the form of loans, grants, work study program, and scholarships. It is important that you not disqualify yourself from assistance before researching opportunities. Because of the costs of attending college, many students today receive some kind of aid. To help you better understand financial assistance and the application process, a free workbook published by the California Student Aid Commission is available from the Financial Aid Office [E-12]. This workbook provides information on who qualifies for financial assistance, the various types of assistance, how to apply, and a calendar of deadlines for applying.

Ability to Benefit
El Camino College Compton Community Educational Center accepts for admission as regular students, persons who do not have a high school diploma or the recognized equivalent, and who are beyond the age of compulsory school attendance in California. If these students apply for financial assistance, the College is required by Public Law 102-26 to determine whether they have the ability to benefit from the education and training it offers. A student may satisfy this requirement by achieving a satisfactory score on the Computerized Placement Test (CPT), Accuplacer. For more information about this test, contact the Assessment Center, Room D-26, phone 310-900-1600, extension 2830. The College's federal and state funds will be jeopardized if the College provides financial assistance to students who do not have a high school diploma or equivalent or to students that have not demonstrated the ability to benefit from college.

Board of Governors Fee Waiver
You may be eligible for a waiver of the enrollment fee if you are a California resident and meet any one of these three criteria:
• You and your family are receiving public assistance from TANF/CalWORKS, or Supplemental Security Income (SSI) or General Assistance/General Relief, or have certification from the California Department of Veterans Affairs;
• You have completed the Free Application for Federal Student Aid (FAFSA) and have "financial need;"  
• You meet the following general income guidelines for the fee waiver:

Academic Standards and Financial Assistance

Students who receive financial assistance are required to maintain satisfactory and measurable academic progress. Students must complete the minimum number of units each year that are required for your student status, as determined by El Camino College Compton Community Educational Center, and maintain a minimum grade point average. Progress will be reviewed at least once each academic year and possibly after the summer term if the student attended at least one of the mini sessions. Students should review the current Satisfactory Academic Progress (SAP) policies in the Financial Aid Planner or on the Financial Aid website so these standards are clearly understood. Financial aid academic standards should not be confused with the campus academic standards set forth by the office of the Vice President for Academic Affairs. Both standards apply to all students even if the student has not applied for financial aid.

Scholarships
These awards are granted to students who best fit the requirements established for each scholarship. There are many scholarships of different kinds for students transferring to baccalaureate institutions, as well as for those attending at El Camino College Compton Center. For a list of scholarships, information as to their requirements, and application forms and deadlines, contact the Financial Aid Office in Room E-12.

Federal & State Financial Assistance
The types of financial assistance listed below are based on financial need. Some are generally available, while others are restricted to students in certain fields of study. Inquire at the Financial Aid Office about other grants and loans that may be available.
• Pell Grant - This is the first element in a financial assistance package. The actual amount is based on an "eligibility index number," the cost of attendance, and the number of units in which you are enrolled.
• Cal Grants - Cal Grant awards are state funded monetary grants given to California residents to help pay for college expenses. The Cal Grant awards do not have to be paid back.
• Federal Work Study - The purpose of this program is to stimulate and promote the part-time employment of students who are in need of earnings from employment to pursue courses of study at El Camino College Compton Community Educational Center. Students may work up to 20 hours per week during the school year.
• Supplemental Educational Opportunity Grant - These grants are for students who demonstrate the highest financial need and are used to supplement the Pell Grant.
• Federal Stafford Loan Program - These loans are from participating banking institutions, with a maximum loan amount of $3,500 for first year students and $4,500 for second-year students per academic year.

Family Size / 2009-2010 Family Income
Family of 1 $15,600 or less
Family of 2 $21,000 or less
Family of 3 $26,400 or less
Family of 4 $31,800 or less
Family of 5 $37,200 or less
Family of 6 $42,600 or less
Family of 7 $48,000 or less
Family of 8 $53,400 or less
Add $5,400 for each additional dependent.
Policies and Procedures
Academic Honesty and Standards of Conduct
Board Policy 5500

Academic Honesty

El Camino College is dedicated to maintaining an optimal learning environment and insists upon academic honesty. To uphold the academic integrity of the institution, all members of the academic community, faculty, staff and students alike, must assume responsibility for providing an educational environment of the highest standards characterized by a spirit of academic honesty.

It is the responsibility of all members of the academic community to behave in a manner which encourages learning and promotes honesty and to act with fairness toward others. Students should not seek an unfair advantage over other students when completing an assignment, taking an examination, or engaging in any other kind of academic activity.

Standards of Conduct

Conduct at El Camino College must conform to the laws of the State of California, District policies, and campus rules and regulations. The El Camino College faculty, staff, and administration are dedicated to maintaining a positive learning environment. Optimal standards for behavior are essential to the maintenance of a quality college environment. These standards will apply to all students on campus, other college property or while attending any college-sponsored event. Violation of such laws, policies, rules, and regulations or behavior adversely affecting suitability as a student, will lead to disciplinary action. Disciplinary actions as noted in Administrative Procedure 5520 may be taken against any person who engages in behavior defined as misconduct.

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

I. DISHONESTY

a. Cheating, plagiarism (including plagiarism in a student publication), or engaging in other academic dishonesty including but not limited to:
   i. 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.
   ii. Copying from another student or former student or allowing another student to copy from one’s work.
   iii. Allowing another individual to assume one’s identity or assuming the identity of another individual.
   iv. Changing answers on a previously scored test, assignment, or experiment with the intent to defraud.
   v. Inventing data for the purpose of completing an assignment, a laboratory experiment, or case study analysis with the intent to defraud.
   vi. Obtaining or copying exams or test questions when prohibited by the instructor.
   vii. 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.
   viii. Using aids such as notes, calculators, or electronic devices unless specifically authorized by the instructor.
   ix. Handing in the same paper or other assignment in more than one class when prohibited by the instructor.
   x. Any other action which is not an honest reflection of a student’s own academic work.

b. Other forms of dishonesty, including but not limited to forgery or attempted forgery of any academic record; alteration or misuse of college documents, records or identification; or knowingly furnishing false information to the District.

c. Unauthorized preparation, giving, selling, transfer, distributing, 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 typewritten class notes, except as permitted by any District policy or administrative procedure.

II. DISRUPTIVE BEHAVIOR, INAPPROPRIATE CONDUCT AND EXPRESSION

a. Disruptive behavior, willful disobedience, profanity or vulgarity, or the open defiance of the authority of, or abuse of, college personnel.

b. Any acts of aggression including verbal or physical actions that are intended to create fear, apprehension, or bodily harm.

c. Lewd, indecent, or obscene conduct on District-owned or -controlled property, or at District-sponsored or -supervised functions.

d. Engaging in expression which is obscene; libelous or slanderous; or which so incites students as to create a clear and present danger of the commission of unlawful acts on college premises, other college property, or while attending any college-sponsored event, or the violation of lawful District administrative procedures, or the substantial disruption of the orderly operation of the District.

e. 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. Obstruction or disruption includes but is not limited to the use of skateboards, bicycles, radios and roller skates.

f. Failure to comply with the directions of a member of the college certificated personnel, college management or supervisory personnel, college staff member, or campus police acting within the scope of his or her duties.

III. DRUGS, ALCOHOL AND SMOKING

a. Unlawful possession, use, sale, offer to sell, or furnishing, or being under the influence of, any controlled substance listed in Sections 11053-11058 of the California Health and Safety Code, 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.

b. Willful or persistent smoking in any area where smoking has been prohibited by law or by regulation of the college or District.

IV. THEFT, ROBBERY AND DAMAGE

a. Committing or attempting to commit robbery or extortion.

b. Causing or attempting to cause damage to District property at any location or to private property on campus.

c. Stealing or attempting to steal District property at any location or private property on campus, or knowingly receiving stolen District property at any location or private property on campus.

d. 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 on campus.

e. Engaging in harassing, hazing, or injurious behavior for any reason or discriminatory behavior based on race, sex, [i.e., gender] sexual orientation, religion, age, national origin, disability, or any other status protected by law.

d. Willful misconduct which results in injury or death to a student or to college personnel.

VI. WEAPONS AND MISUSE OF FACILITIES

a. Possession, sale or otherwise furnishing any firearm, knife,
explosive, or other dangerous object, including but not limited to any facsimile firearm, knife or explosive, unless, in the case of possession of any object of this type, the student has obtained written permission to possess the item from the appropriate State agency and a District employee, which is concurred in by the college president.

b. Unauthorized entry to or use of college facilities, equipment or supplies.

VII. MISCELLANEOUS

a. Persistent or habitual serious misconduct where other means of correction have failed to bring about proper conduct.

b. The commission of any act constituting a crime under California law, on campus or any district-owned property or at any college-sponsored event.

Administrative Procedure 5520
Student Discipline & Due Process Procedure

Disciplinary Action

Disciplinary action appropriate to the misconduct as defined in BP 5500 may be taken by an instructor (see items C-1 and 5 below), the Dean of Student Services or his or her designee [see items C-1, 2, 3, 4, 6, and 7 below], and the Board of Trustees [see item C-8 below]

A. Consequences for Academic Dishonesty

When an instructor has determined that there is evidence of dishonesty in any academic work, the student may receive a failing grade for that piece of work and disciplinary action may be pursued. Any or all of the following actions may be imposed:

1. The instructor may assign a failing grade [no credit] to an examination or assignment in which academic dishonesty occurred.

2. The instructor may remove the student from the class or activity for the day of the incident and one additional class day as stipulated in C.5 of this procedure.

3. The instructor may complete the appropriate reporting forms (Disciplinary Form C – Academic Dishonesty Report Form and/or Disciplinary Form B – Notice of Suspension from Class/Lab/Library) and submit them along with a copy of the evidence to the Dean of Student Services or his or her designee. This information will be placed in the student file.

4. If there is evidence of serious or repeated violations of academic honesty, the college may pursue additional disciplinary action in accordance with the disciplinary measures outlined in this procedure.

B. Notify Campus Police

Misconduct as noted in BP 5500 sections II, III, IV, V and VI should be brought to the immediate attention of the Campus Police or local police department/security force [for courses taught off campus]. This does not preclude a staff member from calling Campus Police for any other misconduct that warrants such action. Campus Police are to be called immediately and a police report will be written with notice to the Director of Student Development, or his or her designee.

C. Discipline

The following types of disciplinary action may be taken or pursued by the college:

1. Warning - A verbal or written notice, given to the student by a faculty member, the Dean of Student Services, or his or her designee, or any college manager or delegated authority that continuation or repetition of the specified conduct may be cause for other disciplinary action. A copy of such action shall be sent to the Director of Student Development or his or her designee and placed in the student file.

2. Reprimand - A written reprimand for violation of specified regulations sent to the student by the Dean of Student Services, or his or her designee, noting that continued violations may result in further disciplinary action. The Dean of Student Services or his or her designee shall place a copy of this reprimand in the student file.

3. Restitution - A letter from the Director of Student Development, or his or her designee, requesting reimbursement for damage or misappropriation of property will be sent to the student. A copy of this letter will be sent to the student file, Vice President of Compton Center, and the Vice President of Student and Community Advancement. Reimbursement may take the form of appropriate service to repair or otherwise compensate for the damage.

4. Disciplinary Probation - Exclusion from college activities or services set forth in the notice of disciplinary probation. It may include one or all of the following and may be imposed upon an individual or groups of students.

a. Removal from any or all college organization offices.

b. Denial of privileges or participation in any or all college or student-sponsored activities or services. Disciplinary probation may be imposed for a period not to exceed one year. Repetition of conduct resulting in disciplinary probation may be cause for suspension or further disciplinary action. A written statement from the Dean of Student Services, or his or her designee, will state those activities from which the student will be excluded. A copy of the disciplinary probation letter will be sent to the student file, Vice President of Compton Center, Vice President of Student and Community Advancement, and Campus Police.

c. Requirement to complete one or more counseling or behavioral modification programs or classes including but not limited to drug/alcohol diversion program, anger management workshop, interpersonal communication workshop, life-skills class, Special Resources Center program and academic or psychological counseling appointments.

5. Removal by Instructor - In cases of academic dishonesty or disruptive behavior, an instructor may remove [suspend] a student from his or her class for the day of the incident and the next class meeting. During this period of removal, a conference shall be held with the instructor and the student in an attempt to resolve the situation that led to the student’s removal.

a. If a student is suspended for one class meeting, no additional formal disciplinary procedures are necessary. A record of the suspension should be sent to the Dean of Student Services or his or her designee and placed in the student file.

b. If a student is suspended from class for the day of the incident and the next class meeting, the instructor shall send a written report of the action to the Dean of Student Services or his or her designee and the President. If the student removed by an instructor is a minor, the Dean of Student Services, or his or her designee, shall ask a parent or guardian of the student to attend a parent conference with the instructor regarding the removal as soon as possible. A college administrator shall attend the conference if any party [instructor, parent, or guardian] so requests.

c. If a student is suspended from class for the day of the incident and the next class meeting, the student shall be allowed to return to the class until due process and the disciplinary procedures are completed unless the student is further suspended as a result of actions taken as defined in Section 6 of these procedures.
6. Suspension - The Dean of Student Services, or his or her designee, may suspend a student as follows:
   a. From one or more classes for a period of up to ten days of instruction; or
   b. From one or more classes for the remainder of the term; or
   c. From one or more classes and activities of the community college for one or more terms not to exceed a period of two years.

7. Immediate Suspension - Any college manager or college delegated authority during non-school hours, may immediately suspend a student from the campus in an emergency action to protect lives or property and to insure the maintenance of order. Within twenty-four (24) hours or the next regular work day of the suspension, the college manager or college delegated authority shall send to the Dean of Student Services, or his or her designee, a written report of the suspension. The Dean of Student Services, or his or her designee, shall send a written notice to the suspended student, informing the student of his or her right to a hearing within ten (10) business days of the suspension. A copy of this notice will be sent to the student file, Vice President of Compton Center, Vice President of Student and Community Advancement, President, and Campus Police.

Immediate suspension will be enforced for the following types of student misconduct:
   a. Possession or use of any weapon, firearms, or explosives.
   b. Willful misconduct which results in injury or death to a student or college personnel.
   c. Assault, battery, sex crimes, including sexual assault, or rape.

When there is probable cause to believe that a student has committed any of the above acts, the student will be immediately suspended from the campus by any college manager or college delegated authority. Within twenty-four (24) hours of, or the next regular work day after the suspension, the manager or college delegated authority shall send to the Dean of Student Services, or his or her designee, a written report of the suspension. The Dean of Student Services, or his or her designee, shall send a written notice to the suspended student, informing the student of his or her right to a hearing within ten (10) business days of the suspension. A copy of this notice will be sent to the student file, Vice President of Compton Center, Vice President of Student and Community Advancement, President, and Campus Police.

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C. Review by the Vice President of Student and Community Advancement

1. The accused may seek review of the decision of the Disciplinary Hearing Committee by delivering to the Vice President of Student and Community Advancement, no later than five (5) business days after receipt of the Disciplinary Hearing Committee’s decision, a signed statement containing:

   a. A statement that the accused appeals the decision; and
   b. A brief statement of why the accused considers the decision to be in error.

2. The Vice President of Student and Community Advancement 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 the Disciplinary Hearing Committee was in error or the sanctions imposed were excessive in light of the seriousness of the charge(s).

3. If the Vice President of Student and Community Advancement 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 to the accused denying review and affirming the decision of the Disciplinary Hearing Committee.

4. If the Vice President of Student and Community Advancement determines that review is appropriate, he or she shall, within ten (10) business days after receipt of the request for review, schedule a meeting giving the accused at least five (5) business days written notice thereof with the accused and the hearing officer, at which time the accused will be allowed to present his or her objections to the Disciplinary Hearing Committee’s decision, and the hearing officer will be allowed to respond thereto.

5. After such a meeting, the Vice President of Student and Community Advancement may reverse, revise or modify the decision and the disciplinary sanctions therein imposed on the accused, or the Vice President may let the decision and disciplinary sanctions stand.

D. General Provisions

1. If students or other persons are suspended or expelled from the campus, they shall not appear on the campus without permission from the Vice President of Student and Community Advancement or designee and must have a Campus Police escort.

2. The time limits specified in the Due Process and Disciplinary Procedures may be shortened or extended if there is a mutual written concurrence between the parties.

3. Failure of the accused to appeal any determination at any step to another step within the specified time limits shall be deemed acceptance by the accused of the last determination rendered.

4. Written notice to an accused pursuant to these procedures shall be sufficient if sent by first class mail to the last known address of the accused currently on file with the college. Notice shall be deemed given on the day of said mailing. Notice shall be in the English language.

5. In the absence of the Dean of Student Services, a designee may be appointed by the Vice President of Student and Community Advancement.

6. No student shall be removed, suspended or expelled unless the conduct for which the student is disciplined is related to college activity or college attendance. In addition, no student may be removed, suspended, or expelled for parking violations.

7. The President or the President’s designee (Campus Police) shall, upon the suspension or expulsion of any student, notify the appropriate law enforcement authorities of Los Angeles County or the City of Torrance of any acts of the student which may be in violation of Section 245 of the California Penal Code - Assault with a deadly weapon or force likely to produce great bodily injury.

Time Limits:

Any times specified in these procedures may be shortened or lengthened if there is mutual concurrence by all parties.

Student Rights and Grievances

Administrative Procedure 5530

[Italicized Information Indicates El Camino College Compton Center]

The purpose of this procedure is to provide a prompt and equitable means for resolving student grievances. These procedures shall be available to any student who reasonably believes a College decision or action has adversely affected his or her status, rights or privileges as a student. The procedures shall include, but not be limited to, grievances regarding:

1. Sex discrimination as prohibited by Title IX of the Higher Education Amendments of 1972
2. Sexual harassment as defined in Board Policy 3430
3. Financial aid
4. Illegal discrimination
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 covered under Board Policy 5500 and Administrative Procedure 5520.
2. Police citations (i.e. “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 are addressed in Board Policy 4231 and Administrative Procedures 4231.

Definitions:

1. Party: The student or any persons claimed to have been responsible for the student’s alleged grievance, together with their representatives. “Party” shall not include the Grievance Hearing Committee or the College Grievance Officer.
2. Superintendent/President: The Superintendent/President or a
designated representative of the Superintendent/President.

3. Student: Any 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. Respondent: Any person claimed by a grievant to be responsible for the alleged grievance.

5. Business Day: Unless otherwise provided, business day shall mean a day Monday to Friday, excluding public holidays and weekends, during which the College is in session and regular classes are held.

6. Grievance Officer: Appointed by the Superintendent/President or designee to assist students in seeking resolution by informal means.

Grievance Hearing Committee:
The Superintendent/President or designee shall at the beginning of each semester, including any summer session, 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 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 of 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 Hearing Committee to facilitate a full, fair and efficient resolution of the grievance, and shall avoid an adversarial role.

Informal Resolution:

1. Each student who has a grievance shall make reasonable effort to resolve the matter on an informal basis prior to requesting a grievance hearing, and shall attempt to solve the problem with the person with whom the student has the grievance, that person’s immediate supervisor, or the local College administration.

2. The Superintendent/President or designated representative 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 Student Organization in attempting to resolve a grievance informally.

3. Informal meetings and discussion between persons directly involved in a grievance are essential at the onset of a dispute and should be encouraged at all stages. An equitable solution should be sought before persons directly involved in the case have stated official or public positions that might tend to polarize the dispute and render a solution more difficult.

4. At no time shall any of the persons directly or indirectly involved in the case use the fact of such informal discussion for strengthening the case for or against persons directly involved in the dispute or for any purpose other than the settlement of the grievance.

5. In an attempt to resolve a complaint informally, the student shall first request a meeting to discuss it with the Dean, Associate Dean or Director (hereinafter Administrator) of the division in which the matter in question resides. Upon such a request, the Administrator shall inform and confer with any staff members named by the student. In turn, the Administrator shall schedule a meeting with the student and, if requested, all involved parties not more than ten (10) business days from the date of request.

6. An informal resolution of the complaint it not reached, which is satisfactory to the student, the student shall have the right to request a grievance hearing.

7. This concludes the Informal Process.

Formal Resolution [Request for a Grievance Hearing]
The student may process any complaint not resolved by the Informal Process. As set forth above, the student can process a grievance as follows:

1. The student shall submit his or her written grievance, on a form provided by the College, to the Grievance Officer (Dean of Student Services or designee) within thirty (30) business days following the student’s first meeting with an Administrator.

2. The grievance shall be signed and dated by the student and shall incorporate a statement that the student had first followed the provisions of the Informal Process.

3. Within fifteen (15) business days following receipt of the request for a grievance hearing, the Dean of Student Services or designee shall appoint a Grievance Hearing Committee, as described above. The Grievance Hearing Committee shall meet in private and, without the parties present, select a chair and determine based on the Statement of the Grievance whether it presents sufficient grounds for a hearing.

4. If the hearing is warranted, it shall be based on the following:
   a) The statement contains facts which, if true, would constitute a grievance under these procedures;
   b) The grievant is a student as defined in these procedures, which include applicants and former students;
   c) The grievant is personally and directly affected by the alleged grievance;
   d) The grievance was filed in a timely manner;
   e) The grievance is not clearly frivolous, clearly without foundation, or clearly filed for purposes of harassment.

5. If the grievance does not meet each of the above requirements, the Hearing Committee Chair shall notify the student in writing of the rejection of the Request for a Grievance hearing, together with the specific reasons 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 Hearing Committee.

6. Any appeal relating to a Grievance Hearing Committee decision that the Statement of Grievance does not present a grievance as defined in these procedures shall be made in writing to the Vice President of Student and Community Advancement within five (5) business days of that decision. The Vice President of Student and Community Advancement shall review the Statement of Grievance and Request for Grievance Hearing in accordance with the requirements for a grievance provided in these procedures, but shall not consider any other matters. The Vice President of Student and Community Advancement’s decision on whether or not to grant a grievance hearing shall be final and not subject to further appeal.

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7. If the Request for Grievance Hearing satisfies each of the requirements, the College Grievance Officer shall schedule 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.

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.
5. Unless the Grievance Hearing Committee determines to proceed otherwise, each party to the grievance shall be permitted to make an opening statement. The Grievance Hearing Committee or grievants shall make the first presentation, followed by the respondent or respondents. The grievant[s] and respondent[s] may present rebuttal evidence. 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 him or herself, and may have the right to be represented by a person of his or her choice, except that an attorney shall not represent a party unless, in the judgment of the Grievance Hearing Committee, complex legal issues are involved. If a party wishes to be represented by an attorney, a request must be presented not 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. A 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 not 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 either audio recording or stenographic recording, and shall be the only recording made. No witness who refuses to be recorded may be permitted to give testimony. At the beginning of the hearing in the event the recording is by audio recording, the Grievance Hearing Committee Chair shall ask each person present to identify him or herself 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 unavailable.
11. Within ten (10) business days following the close of the hearing, the Grievance Hearing Committee shall prepare and send to the Dean of Student Services 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 Enrollment Services or Designee’s Decision:
1. Within fifteen (15) business days following receipt of the Grievance Hearing Committee’s decision and recommendations, the Dean of Student Services or designee shall send to all parties his or her written decision, together with the Hearing Committee’s decision and recommendations. The Dean of Student Services or designee may accept or reject the findings, decisions and recommendations of the Hearing Committee. The factual findings of the Hearing Committee shall be accorded great weight. If the Dean of Student Services or designee does not accept the decision or a finding or recommendation of the Hearing Committee, the Dean of Student 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 accused shall be given written notice of the decision, the disciplinary action, if any, to be taken, and the right to appeal.
2. The accused may seek review of the Dean of Student Services or Designee’s decision by delivering to the Vice President of Student and Community Advancement, no later than ten (10) business days after notice to the accused of the Dean Enrollment Services or Designee’s decision, a signed statement containing:
   a. A statement that the accused appeals the decision; and
   b. A brief statement of why the accused considers the decision to be in error.

Appeal
1. The Vice President of Student and Community Advancement 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 the Dean Enrollment Services or Designee was in error or the sanctions imposed were excessive in light of the seriousness of the charge[s].
2. If the Vice President of Student and Community Advancement determines that review is not appropriate, he or she shall, within ten (10) business days after receipt of the accused’s request for review, send written notice to the accused denying review and affirming the decision of the Dean of Student Services or Designee.
3. If the Vice President of Student and Community Advancement determines that review is appropriate, he or she shall, within ten (10) business days after receipt of the request schedule a meeting with the accused and the Grievance Hearing Committee Chair, giving the accused at least five (5) business days written notice. The accused will be allowed to present his or her objections to the Dean of Student Services or designee’s decision, and the Grievance Hearing Committee Chair will be allowed to respond thereto.
4. After such meeting, the Vice President of Student and Community Advancement may reverse, revise or modify the decision and the disciplinary sanctions therein imposed on the accused, or the Vice President may let the decision and disciplinary sanctions 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.

Time Limits:
Any times specified in these procedures may be shortened or lengthened if there is mutual concurrence by all parties.
Campus Security Act and Student Right to Know

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 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: http://www.elcamino.edu/police/CrimePrevention/index.asp. These materials will be distributed annually to all employees and students, and be available upon request to applicants for enrollment or employment.

Student Right to Know regulations require colleges to annually publish completion and transfer rates. This information is available through appropriate publications and mailings, and on the college website: http://www.elcamino.edu/administration/ir/docs/eccprofile/ECC_College_CommunityProfiles.pdf.

Sexual Assaults on Campus or at Campus-Sponsored Events

The Board of Trustees and the employees of El Camino College Compton Center are committed to maintaining safe campuses. Accordingly, the college has policies and procedures regarding sexual assaults on campus or at a college-sponsored event. Should an assailant be a student or staff member, the appropriate due process procedures as set forth in Board Policy 5138, Standards of Student Conduct/Due Process and Education Code Sections 87405 and 87334-87336 and appropriate sections of the respective union contracts are enforced.
Administration

Barbara Perez  
Vice President,  
El Camino College Compton Center

Fred Sturner

Ricky Shabazz

Macheo Shabaka

Gerald Sequeira

Rudy Ramos

Mytha Pascual

Albert Olguin

Reuben James III

Elizabeth Martinez

Ian Guajardo

Keith Curry

Susan Dever

Wanda Morris

Rachelle Sasser

Rodney Murray

Ronald Gerhard

Directors/Managers/Supervisors

Myeshia Armstrong  
Accounts Manager

Patricia Bonacic  
Director, CalWORKs, TANF, SRC

Robert Butler  
Director, Special Programs and Services

Shirley Edwards  
Director, Child Development Center

Deans/Officers

Keith Curry  
Dean, Student Services

Susan Dever  
Dean, Academic Programs

Wanda Morris  
Dean, Health and Human Services

Rachelle Sasser  
Dean, Human Resources

Rodney Murray  
Dean, Career Technical Education

Ronald Gerhard  
Chief Business Officer

Academic Division Chairs

Eugene Benson  
Career and Technical Education and Health Education and Physical Education

Mohammad Khalilizadeh  
Business Education and Computer Information Systems

Cornelia Lyles  
Social Sciences and Creative and Performing Arts

Donald Roach  
Mathematics and Natural Science

Thamizhchelvi Subramaniam  
Communications, Humanities, English as a Second Language and Foreign Languages

Faculty Council Executive Board

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Estina Pratt  
Vice-Chairperson

Thomas Norton  
Secretary

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<th>Name</th>
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<td>Norton, Thomas</td>
<td>Associate Professor, English</td>
<td>B.A. University of Iowa</td>
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<td>Odanaka, Michael</td>
<td>Professor, Counseling</td>
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<td>M.A. Fuller Theological Seminary</td>
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<td>Osanyinpeju, Abiodun</td>
<td>Assistant Professor, Life Sciences</td>
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<td>Phillips, Marjerrita</td>
<td>Associate Professor, Dance</td>
<td>B.A., M.A. California State University, Long Beach</td>
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<td>Porter, LeRoy</td>
<td>Professor, English as a Second Language</td>
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<td>Pratts, Estina</td>
<td>Professor, Librarian</td>
<td>B.S. Kent State University</td>
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<td>Roach, Donald A.</td>
<td>Professor, Mathematics</td>
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<td>Roach, Ruth</td>
<td>Assistant Professor, English</td>
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<td>Ross, Dovard</td>
<td>Lecturer, Computer Information Systems</td>
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<td>Rydalch, Tommy</td>
<td>Professor, Automotive Technology</td>
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<td>Sahebjame, Mohsen</td>
<td>Associate Professor, Computer Information Systems</td>
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<td>Sassier, Rachelle</td>
<td>Dean, Human Resources</td>
<td>Professor, Educational Psychologist</td>
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<td>Shaikh, Mohomad</td>
<td>Professor, Mathematics</td>
<td>B.S., M.S. University of Bombay</td>
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<td>Sharifian-Attar, Mohammad</td>
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<td>Smith, Darwin</td>
<td>Lecturer, Philosophy</td>
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<td>Sonido, Eleanor</td>
<td>Assistant Professor, Library Information Science</td>
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<td>Stewart, Ella</td>
<td>Associate Professor, Communication Studies</td>
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<td>Subramaniam, Thamizchelvi</td>
<td>Professor, English/Communication Studies</td>
<td>B.A., M.A. University of South Alabama</td>
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<td>Sweeney, Elizabeth</td>
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<td>Professor, Mathematics</td>
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<td>Thomas, Shirley</td>
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<td>Associate Professor, Counseling</td>
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<td>Toles, Wesley</td>
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<td>Uch, Mandeda</td>
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<td>Valdry, Andree</td>
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<td>Van Niel, Pieter</td>
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<td>Ph.D. Stanford University</td>
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<td>Villalobos, Jose</td>
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<td>B.S., M.S., Ph.D. University of Southern California</td>
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<td>Wallano, Eyob</td>
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<td>D.V.M. Kharkov Veterinary Institute</td>
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<td>B.S. Tsing Hui University</td>
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<td>M.S., Ph.D. Illinois Institute of Technology</td>
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<tr>
<td>Yahye, Abdirashid</td>
<td>Professor, Computer Information Systems</td>
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<td>M.S. University of Southern California</td>
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