



# EL CAMINO COLLEGE

2011-2012

CATALOG



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## **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](http://www.elcamino.edu)

# 2011-2012 Academic Calendar

## Fall Semester - 2011

Fall Semester Classes Begin	Saturday	August 27, 2011
Weekday Classes Begin	Monday	August 29, 2011
Last Day to Drop and be Eligible for a Refund (Short-Term)	Friday	September 2, 2011
Labor Day Holiday, Campus Closed	Monday	September 5, 2011
First Day to Apply for Graduation and Certificates (Fall)	Tuesday	September 6, 2011
Last Day to Add (Full Semester Classes)	Friday	September 9, 2011
Last Day to Drop and be Eligible for a Refund (Full-Time)	Friday	September 9, 2011
Active Enrollment Census	Monday	September 12, 2011
Last Day to Drop Without Notation on Permanent Record	Friday	September 23, 2011
Last Day to Apply for Graduation and Certificates (Fall)	Thursday	October 13, 2011
Mid-Term Classes Begin	Saturday	October 22, 2011
Veterans Day Holiday, Campus Closed	Friday	November 11, 2011
Last Day to Drop with a "W"	Friday	November 18, 2011
Thanksgiving Holidays, Campus Closed	Thursday-Sunday	November 24-27, 2011
Fall Semester Ends	Friday	December 16, 2011
Winter Recess, Campus Closed	Friday-Monday	December 23, 2011-January 2, 2012

## Winter Session - 2012

Refer to Winter Schedule of Classes

## Spring Semester - 2012

First Day to Apply for Graduation and Certificates (Spring)	Monday	January 9, 2012
Lincoln's Day Holiday, Campus Closed	Friday	February 10, 2012
Spring Semester Classes Begin	Saturday	February 11, 2012
Weekday Classes Begin	Monday	February 13, 2012
Last Day to Drop and be Eligible for a Refund (Short-Term)	Friday	February 17, 2012
Washington's Day Holiday, Campus Closed	Monday	February 20, 2012
Last Day to Add (Full Semester Classes)	Friday	February 24, 2012
Last Day to Drop and be Eligible for a Refund (Full-Term)	Friday	February 24, 2012
Active Enrollment Census	Monday	February 27, 2012
Last Day to Apply for Graduation and Certificates (Spring)	Thursday	March 8, 2012
Last Day to Drop Without Notation on Permanent Record	Friday	March 9, 2012
Spring Recess, No Classes	Saturday-Friday	April 7-13, 2012
Mid-Term Classes Begin	Saturday	April 14, 2012
Last Day to Drop with a "W"	Friday	May 11, 2012
Memorial Day Holiday, Campus Closed	Monday	May 28, 2012
Graduation	Friday	June 8, 2012
Spring Semester Ends	Friday	June 8, 2012

## Summer Session - 2012

Refer to Summer Schedule of Classes

*Dates subject to change.*

*Please check online for the most up-to-date calendar: [www.elcamino.edu/academics/calendar.asp](http://www.elcamino.edu/academics/calendar.asp)*

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## Board of Trustees

**William J. Beverly**  
*President*

**Ray Gen**  
*Vice-President*

**Maureen O'Donnell**  
*Secretary*

**Mary E. Combs**  
*Member*

**Kenneth Brown**  
*Member*

**Joshua Casper**  
*Member*

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## 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 Solomita**  
*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 [www.accjc.org](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 Department is in charge of the personal safety and security for all who attend classes, as well as all who are employed by El Camino College. Open at all times, the department 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 department 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 Public Relations and Marketing Department, 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

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

**E**l 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.



## El Camino College Core Competencies and Student Learning Outcomes

**CORE COMPETENCIES** define the skills and knowledge a student should possess upon completion of a course of study at El Camino College.

### El Camino College Core Competencies:

Students completing a course of study at El Camino College will achieve the following core competencies:

- I. Content Knowledge:** Students possess and use the knowledge, skills and abilities specific to a chosen discipline, vocation or career.
- II. Critical, Creative and Analytical Thinking:** Students solve problems, make judgments and reach decisions using critical, creative and analytical skills.
- III. Communication and Comprehension:** Students effectively communicate in written, spoken or signed, and artistic forms to diverse audiences. Students comprehend and respectfully respond to the ideas of others.
- IV. Professional and Personal Growth:** Students exhibit self-esteem, responsible behavior and personal integrity. Students are reflective and intellectually curious; they continue to improve themselves throughout life.
- V. Community and Collaboration:** Students appreciate local and global diversity and are respectful and empathetic during personal interactions and competitions. Students effectively collaborate and resolve conflicts. They are responsible, engaged members of society, who are willing and able to assume leadership roles.
- VI. Information and Technology Literacy:** Students locate, critically evaluate, synthesize, and communicate information in various traditional and new media formats. Students understand the social, legal, and ethical issues related to information and its use.

**Student Learning Outcomes** define the skills and knowledge a student should possess upon completion of a particular course or program.

- **Program-Level Student Learning Outcomes** may be found by accessing: [www.elcamino.edu/academics/slo/progoutcomes.asp](http://www.elcamino.edu/academics/slo/progoutcomes.asp)
- **Course-Level Student Learning Outcomes** may be found on the syllabus for all courses.

## 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 2010, 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 2010, the Foundation provided over \$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 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 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 [www.elcaminocollegefoundation.org](http://www.elcaminocollegefoundation.org), or contact Katie Gleason at 310-660-6040 or [kgleason@elcamino.edu](mailto: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 Director, Admissions and Records.

## Children in Classrooms

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

## Student 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.



## How to Reach Us:

**Toll-free 1-866-ELCAMINO – [www.elcamino.edu](http://www.elcamino.edu)  
Area code is 310**

### Academic Divisions

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

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 Resource Center	973-3172
Veterans Office	660-3486

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## Admission

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

### Special Part-Time or Full-Time Students

El Camino College may admit as a special 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.

### Residence Requirements

A student 19 years or older who resides in California is classified as a district resident as defined by the California Education Code and may enroll in any courses for which he/she is qualified. Residence is determined by a union of presence and intent. The student cannot have engaged in any activity that contradicts California residency law and the student may not be in a classification that by law prohibits the establishment of residence. The residence of the student under age 19 is determined by the legal residence of the 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 in 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 \$36 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.

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

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

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

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



## Fee Payment Methods

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

All fees, including any optional fees, such as a Parking Permit or ASB Student Discount Sticker that may have been requested at the time of registration must be paid by the deadline.

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

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

## 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 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.
- 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 or citizen of another country is charged a non-resident fee of \$211 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 \$50 (subject to change) application processing fee for out-of-country applicants.

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

## Non-Resident Tuition Fee Refund

Students will receive a full or partial refund for non-resident tuition if they drop their classes through the online system in the Student 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 eight 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 Student 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 Student 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.

## Email Accounts and the Portal

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

john\_doe@elcamino.edu

Students 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](http://www.elcamino.edu); click on *MyECC*.



## Fees at a Glance (All fees are subject to change.)

Enrollment Fee	.....\$36 per unit
Parking Fee - Car	.....\$35 for each semester
Parking Fee - Motorcycle	.....\$20 for each semester
Parking BOGW - Method A or B	.....\$20 for each semester
Parking BOGW - Method C (FAFSA only)	....\$20 for each semester
Health Fee	.....\$17 for each semester
Non-Resident Tuition	.....\$211 per unit plus the enrollment fee
F-1 Visa Student Health Insurance	.....\$586 per semester
Auditing	.....\$15 per unit
Credit by Examination	.....\$36 per unit
Transcripts	.....First two free; \$5 for each thereafter; \$8 for next-day or hand carry
Class Schedule(s)	.....\$1 in Bookstore
College Catalog	.....\$5 in Bookstore, \$7 by U.S. Mail
ASB Activity/Discount Sticker	.....\$10 per semester
Student Representation Fee	.....50¢ per semester (required)

## 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 session, 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 Bookstore for a cost of \$1.

### 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."

### 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 auditing 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 a New Student Orientation session or complete the online orientation ([www.elcamino.edu-MyECC](http://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](http://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 in mid-August, is a great way for students to get to know the campus, learn about academic programs, services and meet new friends.

## Assessment/Testing

Students are highly encouraged to review material before taking placement tests. Students' performance on the placement tests determines the course level in which they will enroll. Information regarding the tests and preparation Web pages are available at: [www.elcamino.edu/student-services/co/assessmenttesting.asp](http://www.elcamino.edu/student-services/co/assessmenttesting.asp)

### Assessment Procedures

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

In order to begin this process, you must first apply online and have an El Camino College application on file. Next, complete your placement tests at the Assessment/Testing Center located in Room 217 of the Student Services Center. A photo 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. Mathematics 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 requirement 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 or have passed the California High School Proficiency Examination (CHSPE) or have completed six college degree applicable units are considered to have met this qualification. However, students who did not graduate from high school or who do not have a GED or who have not passed the CHSPE or who have not completed the six units 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 toward the Associate degree will be 15.

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

credit information for general education and major preparation. Course credit and units granted at El Camino College may differ from course and unit credit granted by the transfer Institution.

### Art Examination (History of Art):

Art 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 math competency for 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 be 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 examina-

tion, 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

Music 3A, 8A, 11, 12, 13, 15A, 15B, 31A, 31B, 31C, 31D, 32abcd

Theatre 1, 4

### Health Sciences and Athletics Division

Contemporary Health 1, 3

First Aid 1

Nursing 48, 150, 151, 152, 153, 154, 155, 156, 250, 251, 252, 253, 254, 255,

Physical Education 260

Radiologic Technology A, 111, 123

Respiratory Care 170, 172, 174, 176, 178, 280, 282, 284, 286

### Humanities Division

English 1A

French 1, 2, 3, 4

German 1, 2, 3

Italian 1, 2

Spanish 1, 2, 3, 4

### Industry and Technology Division

Administration of Justice 15, 100, 103, 106, 107, 109, 111, 115, 126, 130, 131, 133, 134, 135, 170

Air Conditioning and Refrigeration 5, 6, 21, 22, 23, 25, 27, 32, 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, 21, 22A, 23, 24, 25, 43, 81

Computer Aided Design/Drafting 5, 10abcd, 28abcd, 31abcd, 32abcd, 33abcd, 37abcd, 45, 47, 49

Electronics and Computer Hardware Technology 11, 110, 120, 122, 124, 130, 191ab, 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, 19, 20, 140, 141

Machine Tool Technology 2, 10A, 10B, 10J, 10K, 11abcd, 16ab, 40, 46, 101abcd, 103abcd, 105abcd, 107abcd  
Manufacturing Technology 2, 70, 75  
Nutrition and Foods 11, 15  
Technical Mathematics 1  
Welding 2abc, 15ab, 21, 23abc, 27ab, 40abcd, 45ab

**Mathematical Sciences Division**  
None

**Natural Sciences Division**  
None

## Acceptance of Credit

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

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

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

## Credit for Military Service

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

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

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

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

## Audit of Courses

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

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

1. Priority in class enrollment shall be given to students desiring to take the course for credit toward a degree or certificate.
2. No student auditing a course shall be permitted to change his or her enrollment in that course to receive credit for the course. Students will not be permitted to earn credit by examination for audited courses.
3. A student wishing to audit a class must first obtain a petition to audit form in the Admissions Office. Registration for audit will occur no sooner than the second week of classes.

Fee for auditing a class shall be \$15 per unit per semester (subject to change). Students enrolled in classes to receive credit for 10 or more semester credit units shall not be charged a fee to audit three or fewer semester units per semester. Fees are to be paid before auditing the course and fees are non-refundable. Classroom attendance of students auditing a course shall not be included in computing the apportionment due to the District.

## 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](http://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 timelines and procedures for applying to El Camino College is sent when a prospective student requests application materials. A non-refundable processing fee must be submitted along with the application and other necessary materials.

Prospective students may request an application packet by writing to the International Student Program, El Camino College, 16007 Crenshaw Blvd., Torrance, CA 90506 USA or by stopping by the International Student Program office in Room 101 of the Student Services Center. The application packet includes an official application, instructions for completing the application and submitting other materials, and other useful information. From the Internet go to [www.elcamino.edu/academics/is](http://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](http://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](http://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.

Fees, and mandatory medical insurance at El Camino College for the 2011-2012 school year are approximately \$3,450 for each 16-week semester or \$6,900 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 fees, textbooks and supplies, room and board and insurance, is \$17,900. 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:

A	Excellent	4 points for each unit
B	Good	3 points for each unit
C	Satisfactory	2 points for each unit
D	Passing	less than satisfactory 1 point for each unit
F	Failing	0 points for each unit
P	Pass	(at least satisfactory - units awarded not counted in grade point-average - See Note 1)
NP	No Pass	(less than satisfactory, or failing - units not counted in grade point average - See Note 1)
I	Incomplete	See Note 2
IP	In Progress.	See Note 3
W	Withdrawal	See Note 4
MW	Military Withdrawal	See Note 5

Notes:

### 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. If the student does not complete the required work by the end of the sixth week, the "I" will automatically be removed and the default grade will be assigned. Any extension of the time for completion of the required work must be approved by the division dean.

### 3. IP-In Progress

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

## **Course Repetition Policy and Procedures**

### **Board Policy 4225**

Students may repeat a course in which they have received a substandard grade (that is, D, F, or NC) only once. The new grade and credit will be substituted for the prior grade and credit in computing the grade point average (GPA) and the permanent academic record will be annotated in such a manner that all work remains legible, insuring a true and complete academic history.

In general, students are not permitted to repeat courses in which they have earned a grade of A, B, C, or CR.

Students who have received a W in a course are permitted to re-enroll in that course two more times, for a total of three enrollments.

Specific exceptions to the above policies are detailed in administrative procedures.

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 towards 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 4115**

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

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

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

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

## **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 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](http://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 (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 College (Regla 1600 de la Mesa Directiva) es promover inclusión com-

pleta en todos los programas y servicios. Acomodación y servicios alternativos están disponibles para estudiantes que los requieran llamando al 310-660-3296.

De acuerdo con la Regla 1600 de la Mesa Directiva, una copia de este documento, fácil de leer, está disponible en [www.elcamino.edu](http://www.elcamino.edu) o se puede obtener una copia de este documento llamando al 310-660-3406.

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)

## 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 designee, or to any dean, director, or manager for **immediate** reporting to the District's Director of Staff and Student Diversity or designee.



## Section II

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## 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. The Bookstore will pay up to 50% of the original cost on textbooks that are being used for the next term.

Textbooks may be purchased online at [www.elcamino.edu](http://www.elcamino.edu). Click on the Bookstore and order textbooks for home delivery or in-store pickup.

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

### 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 made 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, and Wednesday, 9:00 a.m. to 7:00 p.m. The Career Center is located in the Counseling Division on the first floor of the Student Services Center. Opportunities for extensive career planning and evaluation of interests, aptitudes, skills, and value assessments/inventories are available. Career exploration and workshops are also offered as they are related to vocational and pre-professional planning and job success.

Appointments for career exploration, assessments/inventories 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, 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 Counseling and Advisement 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 6:00 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 (CDC) is located across Redondo Beach Boulevard from campus in a fully-equipped million dollar facility with licensed and credentialed teachers and staff.

The CDC 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. Call the CDC 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.

## 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 services in the form of book vouchers and grants. 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.

## Learning Resources Center (LRC)

The LRC offers academic support services and resources - tutoring, 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 [www.elcamino.edu/library/lrc](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 1abcd (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 LRC Tutorial Program (Library - West Wing, upper level) offers free drop-in tutoring for over 40 subjects including, but not limited to, English, ESL, mathematics, chemistry, economics, business, biology, music, and foreign languages. All tutoring, whether located in the LRC or in satellite locations around the college, is provided by highly trained, nationally certified tutors. The current tutoring schedule is posted in the Learning Center and at the following website: [www.elcamino.edu/Library/lrc/tutoring](http://www.elcamino.edu/Library/lrc/tutoring).

The **Learning Center** (Library - West Wing, upper level) houses an extensive media-materials collection that supplements instruction in many academic disciplines. The media-materials collection includes audio and video tapes, rock samples, disarticulated skeletons, human anatomy models, maps, text materials, art, and much more. Equipment is also available for viewing videos.

## Library

The Schauerman Library is an excellent facility with more than 120,000 volumes and hundreds of newspapers and periodicals, making it the research center of campus.

During the fall and spring semesters, the library is open from 8:00 a.m. to 8:00 p.m., Monday through Thursday, from 8:00 a.m. to 12:30 p.m. on Friday and from 9:30 a.m. to 2:30 p.m. Saturday. The winter and summer session hours vary (please call the library for these hours). The library is closed when classes are not in session.

Materials are grouped throughout the facilities for easy use in Reference and Reserve/Periodical Rooms as well as in the general collection book stacks. Open stacks are maintained to give students direct access to all books. The Reserve Room contains material required for some supplementary assignments and a collection of textbooks.

The Reference and Periodical Rooms provide materials for research. Computers are available to support library research via online databases and Web access. Online book catalogs are located throughout the library. The Library Media Technology Center, located in the East Wing basement, provides computers for word processing, scanning, and Web access.

A fine of 25 cents a day is charged for overdue circulating books, with a maximum of \$5 for hardcover and \$3 for paperback. A three-day grace period is allowed at the end of each semester. Lost books are charged at the rate of the cost of the book plus \$10 processing fee.

The facility uses the Library of Congress classification system.

The library lobby is frequently used as an adjunct art gallery, displaying works by area artists.

## Special Resource Center

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

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

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

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

Special classes are available with curriculum designed to provide specialized instruction for various types of disabilities and learning styles. These special classes are listed under Educational

Development in the catalog. The Adapted Physical Education Program (APE Program) is available for students who may benefit from physical education offerings with adaptation and personalized instruction. These activity courses are listed within the Physical Education section of the catalog and schedule of classes.

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](http://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, EOP&S, First Year Experience, and the Assessment/Testing Center are on the second floor. The Information Desk in the foyer, staffed during most hours the building is open, has a variety of information available including campus maps and brochures and other information on courses, special events, and campus activities. Building hours are 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/Testing Center

The Assessment/Testing 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/Testing Center also administers the following exams: Ability-to-Benefit, Chemistry Placement, Contemporary Health, DRP, and Mathematics Competency. Contact the Assessment/Testing Center for further information or refer to the El Camino College Assessment/Testing Web page at [www.elcamino.edu/studentservices/co/assessmenttesting.asp](http://www.elcamino.edu/studentservices/co/assessmenttesting.asp).

## Transfer Center

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 [www.elcamino.edu](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](http://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](http://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 Writing Center offers one-on-one writing conferences with highly qualified tutors, all of whom have a bachelor's or master's degree, and computer-assisted instruction in formatting essays, sentence styling, and reading comprehension. In addition, the Writing Center offers tutorials in grammar, documentation, and specialized writing tasks such as college application letters.

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

All services are drop in; no appointment is necessary. Writing Center hours are 7:00 a.m. to 6:00 p.m., Monday through Thursday; 7:00 a.m. to 4:30 p.m., Friday. The Writing Center phone number is 310-660-3873. Please visit the Writing Center's Web page for more information:

[www.elcamino.edu/academics/humanities/writingcenter/index.asp](http://www.elcamino.edu/academics/humanities/writingcenter/index.asp).

## Student Development

The El Camino College Student 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 (AGS), 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 is also 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 experience, 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](http://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 \$4,000 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](http://www.chafee.csac.ca.gov).

## Child Development Grant

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

## Federal Pell Grant

The Federal Pell Grant is a federally funded program that assists students in paying for their education after high school. The Federal Pell Grant awards for full-time students range from approximately \$400 to \$5,500 a year. Federal Pell Grant awards are available only to students who have not received a bachelor's degree.

## Federal Supplemental Educational Opportunity Grant

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

## Aid for Native Americans

Native American students are entitled to receive educational assistance from the Bureau of Indian Affairs. Applications for BIA grants and vocational assistance are available from U.S. Bureau of Indian Affairs regional offices or 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.

## William D. Ford Federal Direct Parent Loan for Undergraduate Students

Federal Direct 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 Federal Direct Stafford Student Loan Program, these loans are made by the United States government.

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.

## William D. Ford Federal Direct Stafford Loans

Federal Direct Stafford Loans are available through the federal government. 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 Federal Direct 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 \$36 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 prior year's federal tax return may be requested. Students are awarded up to \$36 per unit per semester, based on enrollment. This is not a cash award to students, but is simply a waiver of enrollment fees. The Board of Governors' reserve the right to change the enrollment fees and the adjusted gross income financial limits every year. Please check with the Financial Aid Office or the website for current year information.

## Income Criteria Chart - 2010-2011 Academic Year

Number in Household (Including Student)	Family Income 2009 (Adjusted Gross Income or Untaxed Income)
1	\$16,245 or less
2	\$21,855 or less
3	\$27,465 or less
4	\$33,075 or less
5	\$38,685 or less
6	\$44,295 or less
7	\$49,905 or less
8	\$55,515 or less
+	Add \$5,610 for each additional dependent.

You may 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 \$36 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.

**Scholarships**

The El Camino College Foundation Scholarship Office provides significant scholarship opportunities for El Camino College students. These scholarships allow students to continue their educational objectives at El Camino College as well as to transfer to other institutions. Thanks to the generous support of individuals, businesses and corporations in our community, El Camino College Foundation awards more than \$400,000 annually to current students continuing their education at El Camino, incoming high school and students transferring to continue their education.

The El Camino College Scholarship online application period begins in early November (fall semester) and runs through the end of February (spring semester). Students may apply at [portal.elcamino.edu](http://portal.elcamino.edu) and click the link titled "Scholarship Application". Six graded units and a minimum cumulative GPA of 2.0 are required to qualify for the scholarships. Students must complete the on-line application and submit a faculty letter of recommendation to be eligible. High school students interested in applying for the Foundation's high school scholarships should contact their high school counselors.

In addition to the scholarships offered by El Camino College, the Scholarship Office provides information on a vast number of outside scholarship opportunities. For questions or additional information about the scholarships that are available or if you need assistance applying for a scholarship, please contact the Scholarship Office at 310-660-6149 or visit the Scholarship Office located in Administration 119 or online at [www.elcamino.edu/student-services/fao/main\\_scholar.asp](http://www.elcamino.edu/student-services/fao/main_scholar.asp)

**Policies and Procedures****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 knowingly furnishing false information to the District.

c. 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**

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.

## **V. HARASSMENT AND THREATENING/VIOLENT BEHAVIOR**

a. Causing, 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.

b. Committing sexual harassment as defined by law or by District policies and procedures.

c. 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.

## **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 Development, 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 resulting 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 this procedure.

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 of, 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 service, at least three (3) days prior to the meeting, of the date, time, and place of the Board of Trustees' meeting. The student may, within forty-eight hours after receipt of the notice, request that the hearing be held as a public meeting. Even if a student has requested that the Board consider an expulsion recommendation in a public meeting, the Board will hold any discussion that might be in conflict with the right to privacy of any student other than the student requesting the public meeting in a closed session.

The Board may accept, modify or reject the findings, decisions and recommendations of the Superintendent/President and/or the hearing panel. If the Board modifies or rejects the decision, the Board shall review the record of the hearing, and shall prepare a new written decision which contains specific factual findings and conclusions. The decision of the Board shall be final. The final action of the Board on the expulsion shall be taken at a public meeting, and the result of the action shall be a public record of the District.

## 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 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 designated representative 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. 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.

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 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.

4. Formal rules of evidence shall not apply. Any relevant evidence shall be admitted.

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 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: [www.elcamino.edu/police/CrimePrevention/index.asp](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: [www.elcamino.edu/administration/ir/docs/eccprofile/ECC\\_College\\_CommunityProfiles.pdf](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 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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## 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.

Student Learning Outcomes (SLOs) are the specific observable or measurable results that are expected at the end of a course, program of study, or institutional service interaction. Students may review the Student Learning Outcomes (SLOs) for all El Camino College courses at [www.elcamino.edu/academics/slo](http://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, childhood education, economics, education, ethnic studies, 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 a wide variety of courses, certificates, and degrees 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 to prepare students to meet lower division requirements for transfer to four-year colleges and universities or to prepare students for high-skill, high-wage, high-demand careers.

## Fine Arts

**Ms. Constance Fitzsimons, Dean**

**Office - Music Building, Room 101 310-660-3715**

The Division of Fine Arts provides a comprehensive lower division curriculum for Fine Arts majors preparing to transfer to four-year universities. Courses help students develop their talents and skills in interpretive and creative expression while completing general education transfer requirements, vocational and career technical training and certification, certificates and degrees. The division is comprised of seven departments: Art, Communication Studies, Dance, Film/Video, Music, Photography, and Theatre.

The Center for the Arts supports the instructional program of the division and enriches the cultural life of the campus and surrounding communities by presenting resident and guest artist performances, theatre productions, recitals, debates, speakers forums, student productions, Master classes, workshops, art exhibitions and lectures in four campus venues: the Marsee Auditorium, the Campus Theatre, the Haag Recital Hall, and the Art Gallery.

Fine Arts faculty remain active in their professions and are recognized as part of the thriving Los Angeles art scene, bringing vitality and inspiration to the El Camino College classroom. Extensive facilities are designed to maximize student success and include technologically-advanced computer and photo labs, a metal foundry, spacious studios, numerous practice rooms, and an extensive music library.

## 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 a wide array of educational and student service programs in health sciences and kinesiology. Comprised within the division are successful programs such as adapted physical education, athletics, educational development, kinesiology, nursing, radiological technology, respiratory care, sign language, and student health services. In addition, the Special Resource Center provides instruction, support services and accommodations for individuals with disabilities to facilitate access and promote success with achieving their educational goals.

## 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 courses emphasize writing of news and feature stories, culminating in the weekly publication of the school newspaper. Once a year, a magazine production class publishes War-

rior 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**

**Mr. Tom Jackson, Associate Dean**

**Office - Technical Arts Building, first floor, TA 102**

The Division of Industry and Technology offers 16 diverse programs related to current workforce development training and skill-building curriculum. Courses are designed to provide a wide-range of interactive and theoretical curriculum opportunities. Degrees and program certificates are designed to provide students competencies to enter the workplace, and/or transfer to the university. Credit by exam is also available to professionals in the workplace seeking college credit and career advancement.

Certificates and degrees are offered in the following programs: administration of justice (high school explorer academy, peace officer training - levels II and III), air-conditioning and refrigeration (solar and thermal energy applications), 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 (fire academy), 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 pre-engineering. Mathematics courses include basic skills development in pre-collegiate mathematics, general education for students seeking university transfer, and specialized courses for future elementary teachers. Full two-year lower-division undergraduate programs for mathematics, computer science and engineering majors are offered. The computer science program includes language courses in C++ and Java. The division faculty is proud of its distinguished reputation for rigorous preparation of future scholars, scientists, engineers, teachers 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 and *Mathematica*. 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 members 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.

# Associate Degree

## Definition of Associate Degree

The Associate Degree leads students through patterns of learning experiences designed to develop certain capabilities and insights. Among these are the ability to think critically and to communicate clearly and effectively both orally and in writing; to use mathematics; to understand the modes of inquiry of the major disciplines; to be aware of other cultures and times; to achieve insights gained through experience in thinking about ethical problems; to find, evaluate, use, and communicate information in various formats; and to develop the capacity for self-understanding. In addition to these accomplishments, the student shall possess sufficient depth in some field of knowledge to contribute to life-time 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 multi-dimensional, 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 or integrative survey courses such as child development, cultural anthropology, cultural geography, economics, family and consumer studies, history, political science, psychology, sociology, and related disciplines.

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

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

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

**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.

## Requirements for the Associate in Arts for Transfer (AA-T) or Associate in Science for Transfer (AS-T)

At the time of the 2011-2012 catalog publication, these degrees have not been adopted by El Camino College. For more information, please see a counselor.

## 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 Form in the evaluations area located in the Admissions Office by the deadline date published in the schedule of classes.

## Evaluation of Completion of Requirements

Students who want to graduate from El Camino College with an Associate 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.

6. Mathematics Competency requirement - A minimum grade of "C" is required in this area.

7. Major requirement - A minimum grade of "C" in all courses toward the major.

## Catalog Rights

### Board Policy 4100.1

The El Camino College Catalog specifies the general education, major, and unit requirements 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", C/CN, or Pass/No Pass 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

Administration of Justice\*  
 Anthropology  
 Art  
 Childhood Education\*  
 Communication Studies  
 Dance  
 Economics  
 English  
 Ethnic Studies  
 Film/Video\*  
 French  
 General Studies  
 History  
 Japanese  
 Journalism\*  
 Liberal Studies (Elementary School Teaching)  
 Music  
 Paralegal Studies\*  
 Philosophy  
 Physical Education  
 Political Science  
 Psychology  
 Real Estate\*  
 Recreation  
 Sign Language/Interpreter Training\*  
 Sociology  
 Spanish  
 Theatre

\*Indicates Vocational Program

### Associate in Science Degree

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

\*Indicates Vocational Program

ASSOCIATE DEGREE



# 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  
 Physiology 31  
 Psychology 7

##### 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  
 Political Science 2, 3, 10  
 Psychology 2, 5, 7, 8, 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, 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

Philosophy 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

Nutrition and Foods 11

Physical Activity or Fitness Courses:

Dance 9ab, 10, 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, 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, 233abc, 238abcd, 240abcd, 241abcd, 244abcd, 245abcd, 246abcd, 250abcd, 251abcd, 253abcd, 256abcd, 275,

## Associate in Arts Degree (continued)

280, 282abcd, 285abcd, 300abcd, 302abcd, 400abcd, 401abcd, 402abcd, 404abcd, 407abcd, 409abcd

Physical Education 260

Psychology 2, 16, 22

(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 41 of this catalog.

### OPTION III: CSU/UC (IGETC) REQUIREMENTS

See page 43 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.

## 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 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

Political Science 2, 3, 10

Psychology 2, 5, 7, 8, 10, 12, 15, 16, 21, 22

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

#### 3. HUMANITIES: minimum of 3 semester units

Architecture 104

## Associate in Science Degree (continued)

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, 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

#### 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, 10, 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, 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, 233abc, 238abcd, 240abcd, 241abcd, 244abcd, 245abcd, 246abcd, 250abcd, 251abcd, 253abcd, 256abcd, 275, 280, 282abcd, 285abcd, 300abcd, 302abcd, 400abcd, 401abcd, 402abcd, 404abcd, 407abcd, 409abcd  
 Physical Education 260

Psychology 2, 16, 22

(This category may be exempted by one of the following:

- 1) Pass the Contemporary Health waiver exam; or
- 2) Approval of a petition for military service credit; or
- 3) Completion of Nursing 151 and 155.)

#### 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 41 of this catalog.

#### OPTION III: CSU/UC (IGETC) REQUIREMENTS

See page 43 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 of Achievement and Accomplishment Programs

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

Administration of Justice  
 Air Conditioning and Refrigeration:  
     Air Conditioning and Refrigeration Electric Controls  
     Air Conditioning  
     Heating, Ventilation, and Air Conditioning (HVAC)  
     Refrigeration  
 Architecture  
 Art/Digital Arts:  
     Computer Animation  
     Digital Photography  
     Graphic Design  
     Illustration  
     Motion Graphics  
     Web Design  
 Art:  
     Gallery Management  
     Jewelry Design and Fabrication  
 Automotive Collision Repair/Painting:  
     Automotive Collision Repair/Painting I  
     Automotive Collision Repair/Painting II  
 Automotive Technology:  
     Automotive Brakes/Suspension,  
         Transmission/Drive Train Technician  
     Automotive Engine Rebuilding/Repair Technician  
     Automotive Technician I  
     Automotive Technician II  
     Automotive Tune-Up Technician  
 Business:  
     Accounting  
     Business Management  
     Marketing  
     Office Administration: Bookkeeping Clerk  
     Office Applications Specialist  
     Retail Management  
 Childhood Education:  
     Early Childhood Education  
     Early Intervention Assistant  
     Special Education Assistant  
 Computer Aided Design/Drafting  
 Computer Information Systems:  
     Microcomputer Applications  
     Microcomputer Support and Network Management  
 Computer Science

Construction Technology:  
     Construction Technology  
     Cabinet and Fine Woodworking  
 Cosmetology:  
     Cosmetology Level III  
 Electronics and Computer Hardware Technology:  
     Computer Hardware Electronics Technician  
     Electronics Engineering Technician  
     Industrial Computer Control Technician  
 Engineering Technology:  
     Engineering Technology  
     Engineering Technician  
 Environmental Horticulture  
 Fashion:  
     Computer Pattern Making Technician  
     Costume Technician  
     Fashion Design and Production  
     Fashion Merchandising  
     Fashion Stylist  
 Film/Video:  
     Film/Video Production  
 Fire and Emergency Technology:  
     Fire and Emergency Technology  
     Fire Academy  
     Paramedical Technician  
 Journalism  
 Machine Tool Technology:  
     CNC Machine Operator  
     Machinist  
     Numerical Control Programmer  
 Manufacturing Technology  
 Paralegal Studies  
 Photography  
 Real Estate:  
     Mortgage Loan Brokerage  
     Real Estate  
     Real Estate Appraisal  
 Respiratory Care  
 School Health Clerk  
 Sign Language/Interpreter Training  
 Transfer Studies:  
     CSU General Education Breadth  
     Intersegmental General Education Transfer Curriculum (IGETC)

## Certificates of Achievement and Accomplishment Programs

### Certificates of Accomplishment

#### Welding

Automotive Collision Repair/Painting:  
Automotive Accident Reconstruction  
Automotive Collision Investigation

#### Automotive Technology:

Automotive Air Conditioning Technician  
Automotive Brakes and Suspension Technician  
Automotive Engine Rebuilding and Repair Technician  
Automotive Transmission and Drive Train Technician

#### Computer Aided Design/Drafting:

AutoCad Mechanical Drafting Trainee

#### Cosmetology:

Cosmetology Level I

#### Electronics and Computer Hardware Technology:

CompTIA Computer Hardware Technician  
Computer Hardware Technician  
Electronics Technician  
Power Electronics Certificate A

Robotics

#### Radiologic Technology



### 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](http://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](http://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

## Preparation for Transfer (continued)

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](http://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](http://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 subsections; 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\*, 1B\*, 4\*, 7A\*, 7B\*, 20\*, 21A\*, 21B\*
- Geography 1, 6\*, 9
- Geology 1, 2, 3\*, 4\*, 6\*, 15, 30\*, 32\*, 34\*, 36\*
- Oceanography 10\*
- Physical Science 25\*
- Physics 1A\*, 1B\*, 1C\*, 1D, 2A\*, 2B\*, 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
- Microbiology 33\*
- Physiology 31\*
- Psychology 7

#### 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, 161, 170, 180, 190, 210, 220, 270
- 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, 16, 17
- Photography 150
- Theater 1, 4, 8

#### 2. Humanities:

- American Studies 7
- Chinese 1, 2, 24
- English 1B, 10, 12, 15A, 15B, 18, 20, 21, 22, 23, 24A, 25A, 26, 27, 28, 29, 30, 31, 32abc, 34, 35, 36, 39, 40A, 40B, 41A, 41B, 42, 43, 44, 46, 47, 48
- Film/Video 51, 52, 53
- French 1, 2, 3, 4, 5, 6, 24
- German 1, 2, 3
- History 101, 102, 105, 106, 108, 110, 111, 112, 114, 122, 128, 129, 140, 141, 143, 145, 152, 154, 162, 163, 165, 175, 176, 177, 178, 183, 184, 190
- Humanities 1
- Italian 1, 2, 24
- Japanese 1, 2, 3, 4, 25
- Philosophy 2, 3, 7, 10, 11, 12, 14, 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.

## Preparation for Transfer (continued)

### CSU General Education Requirements (continued)

1. **Anthropology and Archaeology:**  
Anthropology 2, 3, 4, 6, 7, 8, 9, 10, 11, 12
2. **Economics:**  
Economics 1, 2, 5
3. **Ethnic Studies:**  
Communication Studies 14  
Ethnic Studies 1  
History 108, 110, 111, 112, 114, 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 101, 102, 105, 106, 108, 110, 111, 112, 114, 122, 128, 129, 140, 141, 143, 145, 152, 154, 162, 163, 165, 175, 176, 177, 178, 183, 184, 190  
History of Science 11
7. **Interdisciplinary Social/Behavioral Science:**  
American Studies 7  
Child Development 103  
Communication Studies 5, 14  
Global Studies 101  
Journalism 12  
Sign Language/Interpreter Training 202
8. **Political Science, Government and Legal Institutions:**  
Political Science 1, 2, 3, 5, 6, 8, 10
9. **Psychology:**  
Physical Education 275

Psychology 2, 5, 8, 9B, 10, 12, 15, 16, 21, 22  
(same as Physical Education 275)

#### 10. **Sociology and Criminology:**

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

#### Area E - Lifelong Understanding and Self-Development

(3 units)

Child Development 103

Contemporary Health 1

Human Development 10

Nutrition and Foods 11

Physical Education 275, 280

Psychology 2, 12, 16, 22, 33

Sociology 102

One unit may be taken from: Physical Education 1abcd, 2abcd, 3abcd, 4abcd, 7abcd, 47abcd, 54abcd, 57abc, 58abc, 65abc, 66abc, 70abc, 71abc, 74abcd, 80abc, 81abc, 101abcd, 102abcd, 110abcd, 111abcd, 132abcd, 133abc, 204abcd, 220abcd, 221abcd, 224abcd, 232abcd, 233abcd, 234abcd, 238abcd, 240abcd, 241abcd, 242abcd, 246abcd, 250abcd, 251abcd, 253abcd, 256abcd, 260, 300abcd, 400abcd, 401abcd, 402abcd, 403abcd, 404abcd, 407abcd, 409abcd

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

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

Group 1: History 101, 102, 105, 106, 108, 110, 111, 112, 122

Group 2: Political Science 1, 8



### University of California

The University of California has 10 campuses located throughout the state. Each campus within the system has its own unique geographic and academic character. The university offers bachelor's, master's, and doctoral degrees in a variety of subject areas.

#### University of California Admission Requirements

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

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.

## Preparation for Transfer (continued)

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

The University of California 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, 12?

### Area 2: Mathematical Concepts and Quantitative Reasoning

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

Mathematics 115<sup>o</sup> #, 120, 130+, 140, 150#, 160#, 161#, 180#, 190#, 191#, 210, 220, 270

Psychology 9A?

Sociology 109?

### Area 3: Arts and Humanities

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

#### A. Arts:

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

Dance 1\$, 3<sup>o</sup>

Film/Video 1&, 54abc

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

Photography 150

Theatre 1, 4

#### B. Humanities:

American Studies 7

Chinese 2?, 24

English 1B+, 10+, 12+, 15A, 15B, 18, 20, 21, 23, 26<sup>+</sup>, 27, 28, 29, 30, 31, 34, 35, 36, 39, 40A~, 40B~, 41A<sup>o</sup>#, 41B<sup>o</sup>, 42~, 44, 46<sup>o</sup>, 47, 48

Film/Video 51, 52, 53

French 24<sup>+</sup>

German 3

History 101, 102, 105, 106, 108, 110, 111, 112, 114, 122, 128, 129, 140, 141, 143, 145, 152, 154, 162, 163, 165, 175, 176, 177, 178, 183, 184, 190

Humanities 1?

Italian 24

Japanese 2, 3, 4, 25

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

Sign Language Interpreter Training 16?, 17A?, 202

Spanish 52A<sup>o</sup>, 52B<sup>o</sup>, 24<sup>+</sup>

### Area 4: Social and Behavioral Sciences

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

American Studies 7~

Anthropology 2, 3, 4?, 6, 7?, 8<sup>o</sup>, 9?, 11?, 12

Child Development 103&

Communication Studies 5?, 14?

Economics 1, 2, 5#

Ethnic Studies 1?

Geography 2, 5, 7

Global Studies 101

History 101, 102, 105, 106, 108, 110, 111, 112, 114, 122, 128, 129, 140, 141, 143, 145, 152, 154, 162, 163, 165, 175, 176, 177, 178, 183, 184, 190

History of Science 11^

Journalism 12

## Preparation for Transfer (continued)

### IGETC Course Requirements (continued)

Political Science 1#, 2, 3, 5, 6⊕, 10  
 Psychology 2, 5, 8, 10~, 11, 12?, 15?, 16⊙, 21?  
 Sociology 101, 102?, 104, 107?, 108, 112?  
 Women's Studies 1 >

#### 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\*4\*, 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

**UC Only:** Language other than English: Proficiency equivalent to two years of high school study in the same language or at least one semester of college level foreign language course work.

Appropriate courses at El Camino College: Chinese 1, French 1, German 1, Italian 1, Japanese 1, Sign Language Interpreter Training 15?, Spanish 1.

**CSU Only:** Graduation requirement in American History and American Institutions.

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

Institutions: Political Science 1, 8

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

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

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

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

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

° Indicates course only acceptable in this area if taken fall, 2000 or later.

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

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

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

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

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

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

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

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

## Honors Program

### 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 to a university. 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 Student Services Center, inside the Counseling Division.

#### Honors Admission Requirements

A student must:

1. Have a minimum 3.1 cumulative GPA from high school or, if already in college, from at least 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.

## Honors Program (continued)

### Completion Requirements

A student must:

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

### Honors Transfer Agreements

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

### 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 selected faculty
- Designation of Honors Transfer Program on El Camino College transcripts and on El Camino College associate degrees
- A parchment-quality Award of Achievement upon program completion
- An honors program director, secretary, and transfer counselors 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 - Public Speaking
- Communication Studies 3 - Small Group Communication
- Communication Studies 4 - Argumentation and Debate
- Communication Studies 12 - Interpersonal Communication
- Contemporary Health 1 - Personal and Community Health
- Issues 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 3 - Critical Thinking and Psychology
- Psychology 5 - General Psychology
- Sociology 101 - Introduction to Sociology
- Spanish 1 - Elementary Spanish I

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:

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

### 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](http://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](http://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

#### (Work Experience and Internship Credit)

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 seven units (including CWEE). Students not enrolled in seven units should contact the appropriate Academic Affairs Division Office.

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

The following scale reflects the equivalent units for hours worked:

- 2 units = 10 hours worked per week
- 3 units = 15 hours worked per week
- 4 units = 20 hours worked per week

#### How to Enroll:

- 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.

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

**Natural Sciences:** Available in the area of environmental horticulture.

## **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 on the Web and may also be obtained at the Bookstore at a cost of \$1.

### 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 inter-collegiate 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 per week 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

## 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 email, 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.

## Accounting – See Business

### ADMINISTRATION OF JUSTICE

#### A.A. Degree and Certificates of Achievement and Accomplishment

Industry and Technology Division  
[www.elcamino.edu/academics/indtech](http://www.elcamino.edu/academics/indtech)

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 in Arts 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.

#### Administration of Justice 15

##### *Introduction to Vice and Narcotics Investigation*

3 units; 3 hours lecture

*Recommended Preparation: eligibility for English 84*

*Credit, degree applicable*

*Transfer CSU*

This is an introductory course that presents an overview of vice crimes, such as illegal narcotics and drugs, gambling, and prostitution, and the special problems those crimes create for law enforcement, the criminal justice system and society.

#### Administration of Justice 48

##### *Laws of Arrest – Penal Code 832*

2 units; 2.25 hours lecture

*Recommended Preparation: eligibility for English 84*

*Credit, not degree applicable*

This course is designed to provide an education and understanding of the laws of arrest according to Penal Code 832. Students will learn the basic laws of arrest; search and seizure; search and handcuffing techniques; and constitutional law.

*Note: Letter grade or pass/no pass option*



**Administration of Justice 49****Laws of Arrest and Firearms – Penal Code 832**

3 units; 2.5 hours lecture, 1.5 hours lab per week 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.

Note: Letter grade or P/NP option.

**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 telephonic, fax, email, and oral search warrants.

Note: Pass/no pass only

Note: This course is repeatable.

**Administration of Justice 67****Continuing Professional Training**

0.5 units; 9 hours lecture (one week course)

Enrollment Limitation: possession of a Peace Officer Standards and Training (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 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: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)

**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\*

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.

**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.

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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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### **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 such behavior. Emphasis in this course is placed on traditional types of punishment, such as incarceration, as well as rehabilitation, probation, parole, and diversion. Incarceration issues include officer and inmate safety, physical security aspects of prison, and prisoner discipline and code of conduct. Rehabilitation topics include education, job skills training and parole. This course covers the basic career skills and knowledge required for employment as detention officers in custodial institutions, probation and parole.

### **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

This course covers the fundamentals of criminal investigation. Topics should include the techniques of crime scene search and recording; collection and preservation of physical evidence; modus operandi processes; sources of information; interview and interrogation; and follow-up investigation.

### **Administration of Justice 115**

#### ***Community and Human Relations***

3 units; 3 hours lecture

*Recommended Preparation:* eligibility for English 84

Credit, degree applicable

Transfer CSU, UC

The 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

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.

### **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.

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

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### 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. Current medical examination conducted within six months (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 specified limited support duties that are not likely to result in physical arrests. The student will participate in a 216 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.

*Note: Students who have earned credit in Administration of Justice 155 cannot receive unit credit for Administration of Justice 150.*

### Administration of Justice 155

#### *Peace Officer Training – Level II Module*

11 units; 9.5 hours lecture, 5 hours lab

*Prerequisite:* Possession of a current Commission of Peace Officer Standards and Training (P.O.S.T.) certified Level III certificate.

*Enrollment Limitation:*

1. Current medical examination conducted within 6 months (for safety and liability reasons).

2. Current California Department of Justice Firearms and Arrest Clearance (Penal Code Section 13511.5) (obtained 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 application 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.

# AIR CONDITIONING AND REFRIGERATION

## A.S. Degree and Certificate of Achievement

Industry and Technology Division  
[www.elcamino.edu/academics/indtech](http://www.elcamino.edu/academics/indtech)

The air conditioning and refrigeration program prepares students for employment in the field and provides upgrade opportunities for currently employed personnel. By completing the degree or certificate requirements, the student will gain proficiency in service, troubleshooting, 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: Air Conditioning and Refrigeration 95abcd, Computer Information Systems 13, Construction Technology 100, Technical Mathematics 1

Total Units: 36

### 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.

#### Air Conditioning:

Air Conditioning and Refrigeration 5, 21, 25, 27, 34

Total Units: 17

#### Air Conditioning and Refrigeration Electric Controls:

Air Conditioning and Refrigeration 5, 6, 30, 32, 34

Total Units: 13

#### 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: 39

#### Refrigeration:

Air Conditioning and Refrigeration 6, 22, 23, 34

### 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 units; 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 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.

**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**Credit, degree applicable**Transfer CSU*

This course covers the principles of gas, electric, radiant and boiler operated heating systems. Classroom discussions focus on maintenance, repair and service techniques for furnaces, steam and hot water boilers. Laboratory exercises emphasize the use of test instruments and safety controls.

**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***

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 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: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)*

## American Studies

**American Studies 7*****History of American Popular Culture***

3 units; 3 hours lecture

*Recommended Preparation: eligibility for English 1A**Credit, degree applicable**Transfer CSU, UC*

This interdisciplinary course examines how popular culture contributes to the search for meaning in everyday American life. Various forms of popular culture including music, film, television, advertising, sports, fashion, design, toys, magazines, comic books, and cyber culture will be analyzed. Students will assess how American popular culture reveals historical forces at work that influence our lives.

## 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.

*Note: This course may satisfy the anatomy requirements for two-year RN and other health-related programs. It does not satisfy the requirements for the Bachelor of Science in Nursing.*

*\*Note: The maximum UC credit allowed for students completing Anatomy 30, Anatomy 32, and Physiology 31 is two courses.*

### Anatomy 32

#### **General Human Anatomy**

4 units; 2 hours lecture, 6 hours lab

Recommended Preparation: Anatomy 30 or Biology 10; 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.

*\*Note: The maximum UC credit allowed for students completing Anatomy 30, Anatomy 32, and Physiology 31 is two courses.*

### 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

### A.A. Degree

Behavioral and Social Sciences Division

[www.elcamino.edu/academics/behavioralsocial](http://www.elcamino.edu/academics/behavioralsocial)

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

#### **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 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.

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

## 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.

## 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 a survey of the field of archaeology in the United States and abroad. It traces the history of archaeology, and reviews the concepts and research methodologies commonly encountered within the field of archaeology. Students will be introduced to basic techniques of soils analysis and archaeological materials analysis.

## 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 non-verbal 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*

This course introduces students to the biocultural study of health, illness and healing systems in traditional as well as modern societies. Using a comparative, cross-cultural perspective, students will explore topics such as healers and healing roles, perceptions of the body, culture-specific syndromes, the impact of Western biomedicine on small-scale cultures and the role of culture in the spread of infectious disease. The impact of globalization on health in communities around the world will also be explored.

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

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### **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, UC*

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: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)*

## **ARCHITECTURE**

### **A.S. Degree and Certificate of Achievement**

*Industry and Technology Division*

*[www.elcamino.edu/academics/indtech](http://www.elcamino.edu/academics/indtech)*

The architecture program prepares students for transfer or for employment in the field. By completing the degree or certificate requirements, the student will gain proficiency in manual and computer aided drafting (CAD) fundamentals, three-dimensional drawing, model making, and structural analysis of buildings. Students will learn to interpret the Uniform Building Code and local planning and zoning ordinances. Competencies will be assessed in accordance with the American Institute of Architects (A.I.A.) certification criteria. Students completing the program may expect to enter industry as an entry-level CAD draftsman in an architecture firm or transfer to an university architecture program.

#### **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.

Architecture 100, 104, 120abcd\*, 150A, 150B, 170, 171, 199abcd\*; four courses from: Architecture 121abcd\*, 125abcd\*, 158, 172, 180 (\*one semester)

Total Units: 35-36

#### **Certificate of Achievement**

A Certificate of Achievement will be granted upon completion of the certificate's core requirements and the general requirements. At least 50% of the requirements for the Certificate of Achievement must be completed at El Camino College.

Core Requirements: Architecture 100, 104, 120abcd\*, 150A, 150B, 170, 171, 199abcd\*;

four courses from: Architecture 121abcd\*, 125abcd\*, 158, 172, 180abcd\* (\*one semester)

General Requirements: English A or qualifying score for English 1A on English Placement Test

Total Units: 35-39

#### **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.

**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.

**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: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)

**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.

**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 per week 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.

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

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**Architecture 150B**

**Architectural Drafting II**

3 units; 2 hours lecture, 4 hours lab per week 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 course is an advanced-level architectural drafting course covering residential buildings. Sketching techniques and computer drawing techniques will be developed to create a set of construction documents for a two-story residence on a sloping site. Current zoning and building codes will be explored to understand the impact they have on the design of a residential dwelling.

**Architecture 158**

**Structures Analysis – Timber**

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

In this course students are introduced to the analysis of structural components in residential buildings. Topics covered include vertical and horizontal loadings, shear and moment diagrams, wood, laminated wood and steel beams, wood and steel columns, foundation sizing, and lateral bracing systems.

**Architecture 170**

**Architectural Graphic Techniques**

3 units; 2 hours lecture, 4 hours lab per week 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 per week 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 per week 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 100 or Construction Technology 110 with a minimum grade of C in prerequisite or equivalent  
Credit, degree applicable  
Transfer CSU

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 199abcd**

(formerly Architecture 199ab)

**Architectural Design Studio**

4 units; 2 hours lecture, 6 hours lab  
Prerequisite: Architecture 170 and 171 with a minimum grade of C in each prerequisite course  
Credit, degree applicable  
Transfer CSU, UC\*

In this course, students learn how to balance the design constraints that architects face when solving architectural problems. Students will design and compose two and three dimensional drawings as well as build models to demonstrate their solutions. Projects will increase in size and scope each time the student takes the course.

\*Note: The maximum UC credit allowed is four units.



# ART

## A.A. Degree and Certificates of Achievement

Fine Arts Division

[www.elcamino.edu/academics/finearts](http://www.elcamino.edu/academics/finearts)

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

### 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 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.

### Art 2

#### ***History of Western Art – Prehistoric to Gothic***

3 units; 3 hours lecture

*Recommended Preparation: eligibility for English 1A*

*Credit, degree applicable*

*Transfer CSU, UC*

This course surveys the history of Western art from the prehistoric era through the Gothic period with an emphasis on painting, sculpture, and architecture. Key art works are studied in relation to historical and cultural contexts that consider the effects of shifting social, political, philosophical, and spiritual paradigms on the production of art.

### Art 3

#### ***History of Western Art – Proto-Renaissance to 19th Century***

3 units; 3 hours lecture

*Recommended Preparation: eligibility for English 1A*

*Credit, degree applicable*

*Transfer CSU, UC*

This course surveys the history and development of Western painting, sculpture, and architecture in relation to changing social, political, religious, and philosophical conditions from the 14th through the 18th centuries. This course, the second in a series of three on the history of Western art, focuses on the Proto-Renaissance, Renaissance, Mannerism, and Baroque periods in Italy, Spain, Flanders, The Netherlands, France, England, Germany and the New World.

### Art 4

#### ***History of Western Art – 19th Century to Contemporary Times***

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, development, and evolution of painting, sculpture, architecture, photography, and related art forms of the 19th, 20th, and 21st centuries. Artworks, art movements, and art styles are studied in relation to relevant social, political, philosophical, and technological factors and the accelerating changes that characterize the modern era. Students are introduced to fundamental methods of analysis that will assist them in understanding art and aesthetic human activities.

### 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.

### Art 7

#### ***Art History of Mexico and Central and South America***

3 units; 3 hours lecture

*Recommended Preparation: eligibility for English 1A*

*Credit, degree applicable*

*Transfer CSU, UC*

This course surveys the art of Mexico, Central America, and South America, from Pre-Colombian civilizations through contemporary times. Key artworks are studied in relation to historical and cultural contexts that consider the effects of shifting social, political, philosophical, and spiritual paradigms on the production of art.

### Art 9

#### ***History of African Art***

3 units; 3 hours lecture

*Recommended Preparation: eligibility for English 1A*

*Credit, degree applicable*

*Transfer CSU, UC*

This course is an introductory survey of African art in relation to its historical and cultural contexts. It focuses on specific groups and regions with an emphasis on sub-Saharan West and Central Africa, stressing the different roles of the visual arts within each culture.

### Art 10ab

#### ***Drawing Fundamentals I***

3 units; 2 hours lecture, 4 hours lab

*Credit, degree applicable*

*Transfer CSU, UC*

This course is an introduction to the techniques, media, and concepts of drawing. Instruction is designed to foster observational, compositional, interpretive, and expressive proficiencies. Representative topics include observation, perception, and the drawing process; contour and line; value, volume, and light theory; composition and pictorial structure; and linear perspective. Also included is an introduction to color theory.

**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 17ab*****Life Drawing I***

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 art and technique of drawing from live models with an emphasis on anatomical structure, representation of gestures, foreshortening and proportion.

**Art 18abcd*****Life Drawing II***

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 a continuation of Art 17ab. Advanced problems in representing the human form are covered, with an increased emphasis on research and innovation.

**Art 19ab*****Water Color Painting I***

3 units; 2 hours lecture, 4 hours lab

Prerequisite: one semester of Art 10ab with minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course introduces the student to the concepts and techniques of watercolor painting with emphasis placed on basic washes, media manipulation, color theory, composition and interpretation.

**Art 20abcd*****Water Color Painting II***

3 units; 2 hours lecture, 4 hours lab

Prerequisite: one semester of Art 19ab with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course is a continuation of the concepts and techniques of watercolor painting. Progressively more challenging problems of technique, color, composition, expression and improvisation will be presented.

**Art 22ab*****Fundamentals of Painting I***

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 introduces instruction in the materials, methods, and techniques of painting. Emphasis is placed on paint manipulation, color mixing, compositional structure, and form translation.

**Art 23abcd*****Fundamentals of Painting II***

3 units; 2 hours lecture, 4 hours lab

Prerequisite: one semester of Art 22ab with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course provides intermediate instruction in the materials, methods and techniques of painting with an emphasis on developing proficiency in the use of pictorial space, color, composition and interpretation.

**Art 24ab*****Life Painting I***

3 units; 2 hours lecture, 4 hours lab

Prerequisite: one semester of Art 22ab and 17ab with a minimum grade of C in prerequisite

Credit, degree applicable

Transfer CSU, UC

The techniques and concepts of life painting are introduced in this course. Translation and adaptation of live-model poses are explored in the context of the painting process. The functions and application of anatomy, volume, chiaroscuro, color, space, and composition are also covered.

**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.

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

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### 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 a fundamental overview of advertising design and stresses creative problem solving. Topics such as marketing, demographic studies, client-agency relationships and American advertising are covered. Through the synthesis and application of design principles and elements, research and layout methods, and production and printing processes, individual projects will be completed representing various types of advertising: magazine, newspaper, broadcast, outdoor, product, and in-store.

### 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, UC*

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 42abcd

#### ***Lettering and Typography II***

3 units; 2 hours lecture, 4 hours lab

*Prerequisite: one semester of Art 41ab with a minimum grade of C*

*Credit, degree applicable*

*Transfer CSU*

This course continues the study of lettering fundamentals including the Roman alphabet and its various categories, families and related fonts. Emphasis is placed on creative problem solving including self-generated project themes and solutions, inventive production strategies, and experimentally-derived aesthetic content. The creation and presentation of a portfolio of art work is also included.

### Art 43abcd

#### ***Graphic Design***

3 units; 2 hours lecture, 4 hours lab

*Recommended Preparation: one semester of Art 37ab with a minimum grade of C or equivalent or one semester of Art 141abcd with a minimum grade of C; and eligibility for English 84*

*Credit, degree applicable*

*Transfer CSU, UC*

This course is an introduction to the concepts and processes of graphic design. Emphasis is placed on the study of graphic design, students' work with computers in raster, vector graphics, and page layout software, as well as with traditional art and design media. Problem-solving skills and the creative design process are emphasized through digital imaging, typography, identify design and page layout.

### Art 50

#### ***Special Topics in Art***

*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 Art 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.

### 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 53ab****Illustration I**

3 units; 2 hours lecture, 4 hours lab

Prerequisite: one semester of Art 10ab 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 61ab****Beginning Ceramics**

3 units; 2 hours lecture, 4 hours lab

Credit, degree applicable

Transfer CSU, UC

This course covers the basic methods of hand-building with clay including forming, glazing, and decorating techniques and offers an introduction to wheel-throwing. Also covered is a brief historical and cultural survey of ceramics.

**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 73ab****Introduction to Jewelry and Metalsmithing**

3 units; 2 hours lecture, 4 hours lab

Credit, degree applicable

Transfer CSU

This course is an introduction to the design and technical processes of jewelry and metalsmithing. Construction techniques such as sawing, soldering, forming, casting, and surface embellishment are employed in combination with various metals and stones. Also covered are issues of contemporary aesthetics and their influence on jewelry design and construction.

**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 81ab****Beginning Sculpture**

3 units; 2 hours lecture, 4 hours lab

Credit, degree applicable

Transfer CSU, UC

This course is an introduction to the techniques, materials, and concepts of sculpture. Instruction is designed to foster observation, composition, interpretation, and expression. Representative topics include clay modeling, casting, and bas relief. Emphasis is placed on design, form, materials, and process.

**Art 82abcd****Life Sculpture**

3 units; 2 hours lecture, 4 hours lab

Prerequisite: one semester of Art 17ab with a minimum grade of C

Recommended Preparation: Art 81ab

Credit, degree applicable

Transfer CSU, UC

This course explores the anatomical structure of the human figure through sculptural studies. Students will develop technical and creative skills including observation, drawing and modeling. Students will work from live models.

**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 31abcd 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.

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

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### 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: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)*

### Art 108

#### **History of American Art**

3 units; 3 hours lecture

*Recommended Preparation:* eligibility for English 1A

*Credit: degree applicable*

*Transfer CSU, UC*

This course is an introductory survey of American Art from its pre-colonial past to the contemporary era with a focus on the social, political, economic, and philosophical conditions that have resulted in a culturally diverse artistic tradition. The contributions and influences of immigrants, Native Americans, African Americans, Asian Americans, Chicano Americans, Latino Americans, and European Americans will be studied in relation to historical contexts.

### 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, typography, 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\**

This is an intermediate level course in the use of digital equipment and software to create original photo-based artwork. Emphasis is placed on improving technique and developing the aesthetic and conceptual possibilities of the image. Topics include working with digital cameras, various methods of image input and output, organizing and tracking photo files, comparison of file formats, improving and manipulating images, and preparing image files for use in print, Web, and multimedia. Digital images are discussed within the broader context of an art historical tradition.

*\*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 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 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 195ab****Portfolio and Career Planning for Artists and Designers**

2 units; 2 hours lecture

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

## A.S. Degree

Natural Sciences Division

[www.elcamino.edu/academics/naturalsciences](http://www.elcamino.edu/academics/naturalsciences)

The degree is designed for students planning to transfer with a major in astronomy. The student will acquire the ability to use problem solving strategies that apply to physical concepts involving mechanics, thermodynamics, sounds, light, electricity and magnetism, and modern physics. Laboratory activities will provide the student with a foundation in measurement and analysis techniques necessary to test, understand and apply physical concepts. Competencies will be assessed by evaluating the student's ability to quantitatively and qualitatively determine the results of physical situations.

### Preparation for the Transfer Major

For information on specific university major requirements, please obtain a transfer curriculum guidesheet 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.

### 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.*

### Astronomy 13abc

#### **Astronomical Optics**

1 unit; 3 hours lab

*Recommended Preparation:* Astronomy 20 or 25 or equivalent with a grade of B or better; Mathematics 80

*Credit, degree applicable*

*Transfer CSU*

In this course, the student will be introduced to principles of astronomical optics. The student will apply those principles to the design, fabrication, and use of a telescope, which will be tested under the night sky. Primary mirrors will be ground, smoothed, polished, and figured by hand. Extensive testing will be done in the optical shop. Optics and optical testing theories will be presented. Students will design and build a custom optical tube assembly and telescope mount.

*Note: Minimum cost for a completed telescope is \$250.*



### Astronomy 20

#### **The Solar System**

3 units; 3 hours lecture

*Recommended Preparation:* eligibility for English 84

*Credit, degree applicable*

*Transfer CSU, UC*

This course is an introduction to the major planets and the smaller members of the solar system such as moons, asteroids, Kuiper Belt Objects, and comets. Theories of the origin and histories of the planets are presented. The early history of astronomy and the Copernican Revolution are discussed. Sky phenomena such as the constellations, the seasons, eclipses, and planetary motions are demonstrated in the planetarium. The possibility of life elsewhere in the solar system is examined.

### Astronomy 25

#### **Stars and Galaxies**

3 units; 3 hours lecture

*Recommended Preparation:* eligibility for English 84

*Credit, degree applicable*

*Transfer CSU, UC*

This course is an introduction to the Universe and its history. The main focus is on how astronomers learn about stars and galaxies. The formation, life histories, and fates of different kinds of stars, including the Sun, are examined. Exotic stars as well as black holes are explored. The structure and distribution of galaxies are discussed, with a focus on our own Milky Way Galaxy. The history of the Universe, starting with the Big Bang, is also investigated. The course includes a discussion of the possibility of finding life elsewhere in the Universe.

### Astronomy 50

#### **Special Topics in Astronomy**

*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 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: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)*

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

# AUTOMOTIVE COLLISION REPAIR/PAINTING

## A.S. Degree and Certificates of Achievement and Accomplishment

Industry and Technology Division  
www.elcamino.edu/academics/indtech

The automotive collision repair/painting program prepares students for employment in the field and provides upgrade opportunities for currently employed personnel. By completing the degree requirements, students will gain proficiency in industry repair standards, vehicle identification and construction, estimating, body repairs, frame repairs, vehicle alignment, welding, and vehicle painting. In addition, completing the certificate requirements prepares students for employment in the fields of automotive insurance investigation, vehicle accident reconstruction, automotive collision repair, or automotive painting. Competencies will be assessed regularly by student performance in the automotive collision repair/painting classroom and laboratory.

### 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 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.

*Note: The two-course sequence of 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 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: Two-course sequence Automotive Collision Repair/Painting 1A and 1B is the same as four semesters of Automotive Collision Repair/Painting 4abcd.*

### 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

#### *Automotive 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.

### **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: Painting***

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, plastic and solder filling, vehicle construction and identification, plastic parts, estimating, surface preparation, vehicle masking, primer, paint removal, paint additives, painting equipment, spot painting and complete refinishing.

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



### **Automotive Collision Repair/Painting 6abcd**

#### ***Automotive Collision Repair Applications***

3 units; 6 hours lecture, 10 hours lab

*(6 week 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 20**

#### ***Automotive Collision Investigation***

3 units; 3 hours lecture

*Credit, degree applicable*

*Transfer CSU*

This is an introductory course in automotive collision investigation designed for students preparing for employment in the fields of automotive collision repair, automotive insurance investigation, and accident reconstruction. Emphasis is placed upon vehicle identification, vehicle design and construction, occupant restraint systems, tire identification and construction, identification of skid-marks, the coefficient of friction, and speed from skid formulas.

### **Automotive Collision Repair/Painting 22**

#### ***Automotive Repair Fraud***

3 units; 3 hours lecture

*Credit, degree applicable*

*Transfer CSU*

This course covers the elements of fraud encountered in the automotive repair industry and is designed to prepare students for employment in the fields of automotive collision repair, automotive insurance investigation, and accident reconstruction. Topics covered include staged traffic accidents, Vehicle Identification Number (VIN) swapping, title washing, VIN cloning, National Highway Traffic Safety Administration (NHTSA), Federal Motor Vehicle Safety Standards, National Insurance Crime Bureau (NICB), automotive insurance industry, fraud detection and investigation procedures, collection of evidence, witness marks and material transfer, identification and implications of prior damage, vehicle crush analysis, traffic accident photography, vehicle lamp analysis, and vehicle fires.

### **Automotive Collision Repair/Painting 24**

#### ***Automotive Collision Analysis***

3 units; 3 hours lecture

*Recommended Preparation: Automotive Collision Repair/Painting 20*

*Credit, degree applicable*

*Transfer CSU*

This course covers the elements of automotive collision analysis and is designed to prepare students for employment in the fields of automotive collision repair, automotive insurance investigation, and accident reconstruction. Emphasis is placed on accident causation factors, collision deformation, low speed impacts, calculation of drag factors, speed determination from crush analysis, Event Data Recorder (EDR), failure analysis, roadway debris, and human factors.

**Automotive Collision Repair/Painting 26**

***Automotive Accident Reconstruction***

3 units; 3 hours lecture

*Recommended Preparation: Automotive Collision Repair/Painting 20 or 24*

*Credit, degree applicable*

*Transfer CSU*

This course covers the elements of automotive collision reconstruction and is designed to prepare students for employment in the fields of automotive collision repair, automotive insurance investigation, and accident reconstruction. Emphasis is placed on photography of vehicle damage and computer modeling, measuring and documenting skid marks, calculation of drag factors, speed from skid marks considering radius and critical speed scuff, determination of combined velocities, occupant dynamics, time and position analysis, force line determination and Principle Direction of Force (PDOF), conservation of momentum analysis, and Delta-V determination.

**Automotive Collision Repair/Painting 50**

***Special Topics in Automotive Collision Repair/Painting***

*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 Collision Repair/Painting 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.

**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: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)*



## AUTOMOTIVE TECHNOLOGY

### A.S. Degree and Certificates of Achievement and Accomplishment

Industry and Technology Division  
[www.elcamino.edu/academics/indtech](http://www.elcamino.edu/academics/indtech)

The automotive technology program prepares students for employment in the field and provides upgrade opportunities for currently employed personnel. By completing the degree or certificate requirements, the student will gain proficiency in safety practices, automotive service, testing, troubleshooting, brakes, suspension, wheel alignment, engine tune-up, electrical systems, fuel systems (carburetion and fuel injection), emission systems, transmissions, drive trains, engine repair, engine rebuilding, automotive machining, or air conditioning. Competencies will be assessed regularly in accordance with Automotive Service Excellence (ASE) standards. A student completing degree or certificate requirements may expect to enter industry as a technician in automotive service, repair, tune-up, smog certification, or automotive air conditioning.

#### 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 Brakes/Suspension, Transmission/Drive Train Technician:

Automotive Technology 11 or 14 and 16; Automotive Technology 33 or 34 and 35  
Total Units: 16

#### Automotive Engine Rebuilding/Repair Technician:

Automotive Technology 41 or 42; Automotive Technology 43 or 45  
Total Units: 12

#### 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

#### Automotive Tune-Up Technician:

Automotive Technology 22A or 23 and 24; Automotive Technology 22B or 25 and 26  
Total Units: 16

#### 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



**Automotive Technology 1****Introduction to Automotive Service**

2 units; 2 hours lecture, 2 hours lab

Credit, degree applicable

Transfer CSU

This is an introduction to the study of automotive servicing including engine, ignition, fuel, cooling, charging, cranking, drive line, brakes and suspension systems construction and operational theories. Laboratory activities include maintenance procedures and proper use of tools utilized in the field.

**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 11.

**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 22A.

**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 22A.

**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.

### 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 33.*

### 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 33.*

### 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.

### 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, engine maintenance and the installation of long or short blocks (no engine rebuilding). Laboratory activities stress the proper use of equipment utilized in the 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 covers the study of 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.



**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: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)

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

**BIOLOGY****A.S. Degree**

Natural Sciences Division

[www.elcamino.edu/academics/naturalsciences](http://www.elcamino.edu/academics/naturalsciences)

The program is designed to provide students the opportunity to obtain a degree upon successful completion of the requirements of a biology transfer major. This major may include biology, botany, zoology, microbiology, molecular biology, or anatomy and physiology. The student in this program will master cell anatomy and physiology, molecular and Mendelian genetics, and the anatomy, morphology, physiology, life histories, ecology, and evolutionary aspects of archaeobacteria, eubacteria, protist, fungi, and plant and animal kingdoms. Competency will be measured by exams and lab practicum exams, and in the performance of such laboratory skills as dissections, microbiological techniques, microscopy, and electrophoresis.

**Preparation for the Transfer Major**

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

**Biology 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 all living things: prokaryotes, protists, fungi plants, and animals. Basic principles of structure, function, and relationships of living organisms are discussed with special reference to humans.

\*Note: Students will not receive UC credit for Biology 10 if taken after Biology 101.

**Biology 11****Fundamentals of Zoology**

4 units; 3 hours lecture, 3 hours lab

Recommended Preparation: eligibility for English 1A

Credit, degree applicable

Transfer CSU, UC\*

This course introduces major animal groups and the single-celled protozoans. Comparative studies of animal structure and physiology will illustrate principles of classification and evolution. Ecological topics include animal behavior, natural history, and relationships of animals to humans. Genetics and basic cell biology are also covered.

### **Biology 12**

#### ***Field Zoology***

4 units; 2 hours lecture, 6 hours lab

*Recommended Preparation:* eligibility for English 84

*Credit, degree applicable*

*Transfer CSU, UC*

This course is a survey of invertebrate and vertebrate animals involving general principles of biology, taxonomy, physiology, and ecology with an emphasis on California. Major invertebrate phyla will be introduced in the classroom and through tide pool experience. The taxonomy, anatomy, and natural history of all major vertebrate animal classes will be explored through classroom lecture and demonstration and field assessment. Field experience will include both optional and required trips to museums, aquariums, and field locations.

### **Biology 15**

#### ***Environmental Aspects of Biology***

3 units; 3 hours lecture

*Recommended Preparation:* eligibility for English 84

*Credit, degree applicable*

*Transfer CSU, UC*

Basic ecological and biological principles and concepts are emphasized in the study of the structure and function of ecosystems. Major ecological problems such as over-population, resource depletion and food production are related to endangered species and habitat degradation. Environmental pollution of air and water resources is considered in local areas as well as national and international situations. Air quality and global warming issues are considered. Students are encouraged to participate in local activities addressing environmental problems and restoring and improving local habitats.

### **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:* For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)

### **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.

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

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**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 unit; 3 hours lab

*Prerequisite:* Biology 103 with a minimum grade of C or equivalent or concurrent enrollment

*Credit, degree applicable*

*Transfer CSU, UC*

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; 1 hour lecture, 5 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. The content covers standard notebook preparation for industry and academia; solution and media preparation; sterile technique; bacterial propagation; basic techniques of DNA extraction and manipulation; the use and maintenance of basic laboratory equipment; quality control and laboratory safety.

**Biotechnology 2*****Advanced Techniques of Biological Technology***

2.5 units; 1 hour lecture, 5 hours lab

*Prerequisite:* Biotechnology 1 with a minimum grade of C

*Credit, degree applicable*

*Transfer CSU*

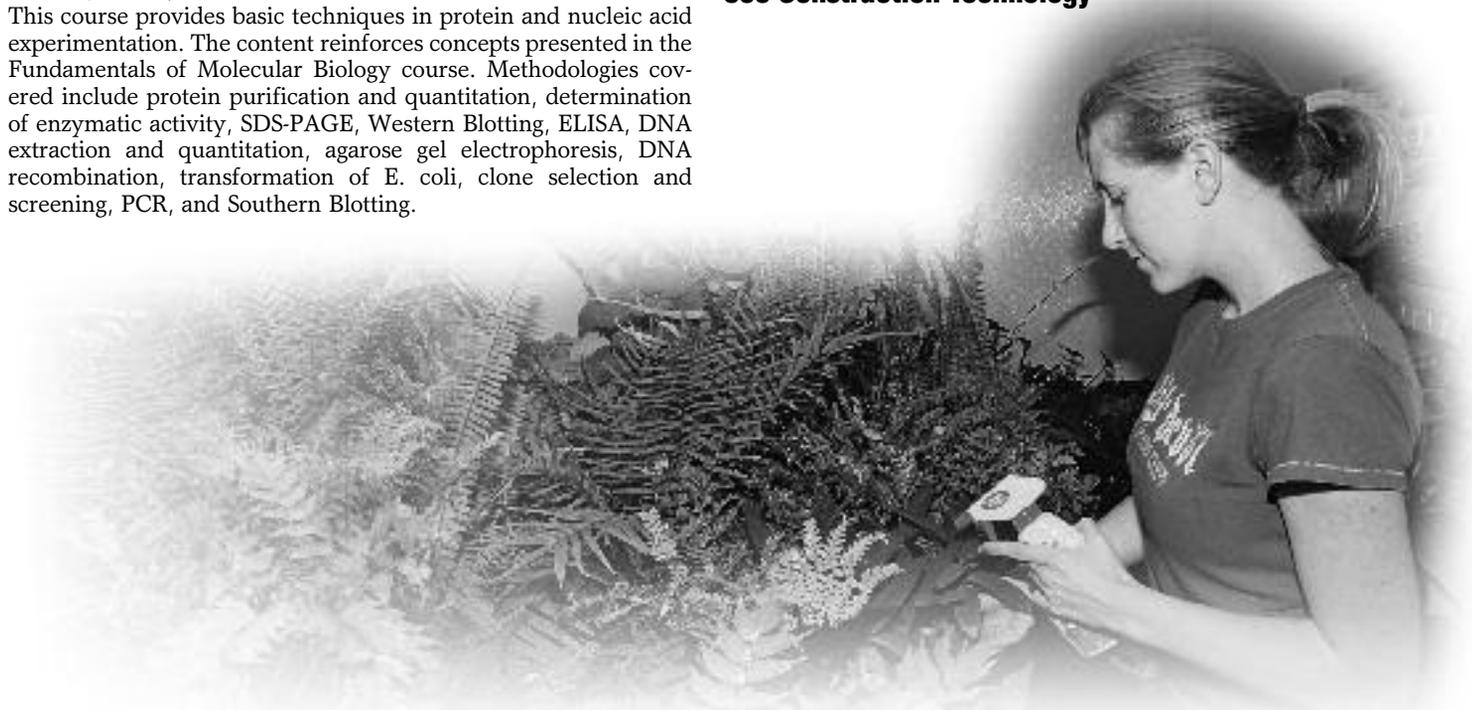
This course provides advanced skills for the biotechnology laboratory. This is the second of two courses in biotechnology techniques. Methodologies include protein purification with column chromatography and quantitation with a spectrophotometer; protein characterization with SDS-PAGE and Western Blotting; 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

### A.S. Degree and Certificates of Achievement

*Business Division*

[www.elcamino.edu/academics/business](http://www.elcamino.edu/academics/business)

**Business Administration** – The program is designed to provide the opportunity for a transfer business major to achieve an associate degree. The student will acquire a foundation in basic accounting principles, business law, and macroeconomics and microeconomics theory. Students will be able to apply methodologies to assess fiscal and monetary policy in the marketplace and understand the basics of contract law. Competencies will be assessed through examination and projects.

**Business (emphasis in Accounting)** – By completing the degree or certificate requirements of the accounting program, students will acquire the ability to apply the fundamental theory, principles, and practices of the accounting cycle for unincorporated and corporate forms of business, financial, and managerial accounting theory as well as cost accounting and cost procedures used in business and industry. The student will also learn income tax regulations pertaining to individual and business income tax preparations and planning. Competencies will be assessed regularly through examinations and comprehensive problems. The major provides career opportunities in entry-level accounting positions.

**Business (emphasis in Business Management)** – The program provides students with the opportunity to obtain a degree or certificate in business management. The student completing this program will have the ability to organize, operate, and manage business organizations, utilize human resources, improve working relationships, draft letters and reports, and speak in various business situations. Competency will be measured by examinations, presentations, projects, and case problems.

**Business (emphasis in Marketing)** – The program is designed to provide students with the opportunity to obtain a degree or certificate in marketing. The student will explore opportunities in the marketing field, acquire basic marketing terminology, applying marketing concepts to the role of marketing in society and in the business firm, and balance factors that influence marketing decision-making in the global economy. Competency will be measured by examinations, projects, and case problems.

**Business (emphasis in Office Administration)** – The degree and certificate programs in office administration include options in office systems, management, bookkeeping, computer applications, and office clerk. Upon completion of the requirements, students will be able to operate office equipment appropriate to their specialty, apply American business office procedures, and understand information management principles, operations, and organization. Competency will be assessed regularly through examinations and projects.

#### 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

##### Business Management Major

A minimum of 12 units must be completed at El Camino College. Business 1A or 11; Business 14 or 21; Business 20, 22, 24, 25, 29; Business 27 or 28; Law 5  
Recommended electives: Business 1B, 17, 90, Computer Information Systems 13  
Total Units: 27-28

##### Certificates of Achievement - Business Management

A Certificate of Achievement will be awarded to the student completing the requirements in the Business Management or Retail Management options.

**Business Management:** Business 1A or 11; Business 14 or 21; Business 20, 22, 24, 25, 29; Business 27 or 28; Law 5  
Total Units: 27-28

**Retail Management:** A minimum of 15 units must be completed at El Camino College. Business 1A or 11; Business 14, 15, 19, 20, 21, 22, 28, 29, Computer Information Systems 13  
Total Units: 30-31

##### Marketing Major

A minimum of 12 units must be completed at El Camino College. Business 1A or 11; Business 12 or 24; Business 14, 22, 25; 29; Business 27 or 28;  
Law 5  
Recommended electives: Business 17, 20, 21, 90, Computer Information Systems 13  
Total Units: 24-25

##### Certificate of Achievement – Marketing

A Certificate of Achievement will be awarded to the student completing the courses listed below. A minimum of 12 units must be completed at El Camino College.

Business 1A or 11; Business 12 or 24; Business 14, 22, 25, 29; Business 27 or 28; Law 5. Students who anticipate employment with large businesses are advised to take Business 12. Those interested in smaller enterprises should complete Business 24.  
Total Units: 24-25

##### Office Administration Major

18 units of the major requirements must be completed at El Camino College. Required courses are: Business 16, 27, 28, 41, 43, 52A, 52B, 54. In addition, students must complete the Office Systems Option or the Management Option.

**Office Systems Option:** Business 40, 55, Business 60C; two courses from Business 49abcd, 56abcd, 57abcd; one course from: Computer Information Systems 26, 28  
Total Units: 32

**Management Option:** Business 22, 29, 60B; three courses from: Business 1A or 11, Business 20, 25, Computer Information Systems 13  
Total Units: 36-37

**Certificates of Achievement - Office Administration**

**Bookkeeping Clerk:** A Certificate of Achievement will be granted to students completing the courses listed below. A minimum of 10 units must be completed at El Camino College. All units must be completed within five years of the date of issue of the certificate. Students who have questions regarding this requirement should contact the Counseling Division or Evaluations Unit for a waiver petition.

Business 11 or 1A; Business 15, 16, 40, 41, 43, 60B; Business 3 or Computer Information Systems 26; Business 54 or Computer Information Systems 13

Total Units: 20-23

**Office Applications Specialist:** A Certificate of Achievement will be granted to students completing the courses listed below. A minimum of 11 units must be completed at El Camino College. All units must be completed within five years of the date of issue of the certificate. Students who have questions regarding this requirement should contact the Counseling Division or Evaluations Unit for a waiver petition.

Business 16, 27, 40, 52A, 52B, 54, 55, 60C;

two courses from: Business 49abcd, 56abcd, 57abcd

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.

**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.

**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 corporation 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 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. Major topics include job order, process costing, 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. Major topics include income inclusions, exclusions, exemptions, capital gains and losses, and 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.*

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

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### **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 12**

#### ***Advertising***

3 units; 3 hours lecture

*Recommended Preparation:* eligibility for English 84

Credit, degree applicable

Transfer CSU

In this course students will study the field of advertising and promotion from a marketing perspective. Topics to be covered include the practice and management of advertising by agencies, clients, and the media. Also emphasized are the concepts of ethics, social responsibility, and consumer benefits. Effective techniques in the preparation of different types of advertisements will also be analyzed and applied.

### **Business 14**

#### ***Marketing***

3 units; 3 hours lecture

*Recommended Preparation:* eligibility for English 84

Credit, degree applicable

Transfer CSU

This course provides an intensive study of concepts and strategies on which the field of marketing is based. Emphasis will be on product decisions, distribution decisions, promotion decisions, and pricing decisions. The general elements of electronic marketing will also be studied.

*Note: Letter grade or P/NP option.*

### **Business 15**

#### ***Business Mathematics***

3 units; 3 hours lecture

*Recommended Preparation:* eligibility for English 84

Credit, degree applicable

This course is designed to prepare students for mathematical concepts involving quantitative reasoning and analysis in management, finance, accounting, real estate, and other areas of business. The course content involves a thorough study of all aspects of business mathematics including basic computational skills, bank reconciliation, use of business formulas and equations, payroll, discounts and markup/markdowns, simple and compound interest, present value analysis, annuities and sinking funds, credit, depreciation and inventory, taxes, insurance, financial reports, and business statistics.

*Note: Letter grade or P/NP option.*

### **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, students examine the basic economic issues applied to individual and family management, such as financial planning, record keeping, budgeting, managing money, credit, and taxes. Emphasis is placed on 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.

*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 semester 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 semester only.***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: eligibility for English 84; keyboarding skill is strongly recommended*

*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 writing tools, including speller 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 54**

#### ***Microsoft Office – Integrated Software Applications***

*4 units; 2 hours lecture, 4 hours lab*

*Recommended Preparation: Business 52B or Computer Information Systems 13*

*Credit, degree applicable*

*Transfer CSU*

Utilizing Microsoft Office in a Windows environment, the student will learn how integrated software allows sharing of data in various applications. Students will be introduced to spreadsheets, databases, and presentation applications and will learn how to integrate them with Word documents and the World Wide Web. Managing email and contacts using personal information management software is also introduced.

### **Business 55**

#### ***Advanced Microsoft Office – Integrated Software Applications***

*4 units; 2 hours lecture, 4 hours lab*

*Prerequisite: Business 54 or Computer Information Systems 13 with a minimum grade of C in prerequisite or equivalent*

*Credit, degree applicable*

*Transfer CSU*

Extending upon the student's basic knowledge of Microsoft Office software applications (including Word, Excel, Access and PowerPoint), the course will focus on advanced techniques and integration among these applications, the Internet, and other sources. Students will also learn how office professionals can use electronic communications and information management software effectively.

### **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*

*Recommended Preparation: Business 52B or Business 55*

*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*

*Recommended Preparation: Business 55*

*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*

*Credit, degree applicable*

*Transfer CSU*

In this course the student will learn the touch keyboarding method for alphabetic and numeric/symbol keys on microcomputers. 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.*

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

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**Business 60B*****Microcomputer Document Processing***

1 unit; 0.5 hour lecture, 1.5 hours lab

*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

*Prerequisite:* Business 60B 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 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

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

Credit, degree applicable

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

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

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.



**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 95/96abcd**

**Cooperative Work Experience Education  
(Business Management/Marketing)**

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 Management/Marketing 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

## A.S. Degree

Natural Sciences Division

[www.elcamino.edu/academics/naturalsciences](http://www.elcamino.edu/academics/naturalsciences)

The program is designed to provide students the opportunity to obtain a degree upon successful completion of the requirements of a chemistry transfer major. The student will acquire the ability to apply fundamental theories and principles of atomic and molecular structure and to understand energy concepts and kinetics in both inorganic and organic reactions. Laboratories are designed to complement the lecture material providing the student with a foundation in quantitative and qualitative chemical techniques. Competencies will be assessed regularly by examining student abilities to predict chemical reactions, explain observed properties and behaviors, write reaction mechanisms, and perform standard laboratory procedures.

### Preparation for the 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 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.*

## Chemistry 1A

### General Chemistry I

5 units; 5 hours lecture, 4 hours lab

*Prerequisite: (1) 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; (2) eligibility for Mathematics 170*

*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 nonmetallic 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.

## 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 stereoisomerism. 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, preparation, reactions and derivatives of carboxylic acids, amines, aldehydes and ketones. Principles of biochemistry are introduced. Descriptions of the structures and biochemical reactions of carbohydrates, lipids, proteins, enzymes and nucleic acids will be analyzed. Catabolic/anabolic pathways as well as the energy consumed or produced by the metabolism of carbohydrates, fats and proteins will be examined. The chemistry of photosynthesis will be studied.

\*Note: Students will not receive UC credit for Chemistry 21B if taken after 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: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)

**CHILDHOOD DEVELOPMENT****A.A. Degree and Certificates of Achievement**

Behavioral and Social Sciences Division

[www.elcamino.edu/academics/behavioralsocial](http://www.elcamino.edu/academics/behavioralsocial)

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, cognitive, and psychosocial domains and will develop skills needed for working effectively with families, co-workers, and community agencies. Students will also gain the ability to design, implement, and evaluate developmentally appropriate and culturally sensitive curriculum. Program assessment will be conducted regularly through examinations, presentations, student self-assessment, portfolios, and tracking student employment and promotion in the teaching field.

**El Camino College Major Requirements**

A minimum of 15 units of the major requirements must be completed at El Camino College.

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 Development 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 Development 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 Development 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 Development 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 Development 152 and 154, must be completed at El Camino College.

Child Development 103, 104, 111, 150, 152, 154, 169; one course from Child Development 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.

**The State Department of Social Services** will qualify a person as a preschool teacher if the student has at least 12 units in Early Childhood Education. These units must include Child Development 103, 104 and one course from Child Development 116, 117, 118 or 119. Preschool directors must complete 3 additional units in Program Administration (Child Development 129 or 130).

**The California State Department of Education Child Development Permits:**

The Child Development Permit qualifies the holder to teach in publicly funded early childhood education programs such as Head Start and State Preschool.

All Child Development Permits are renewable after 5 years by completing 105 hours of professional growth activities. This may include college courses, staff development 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, Nursing 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: 350 days of 3 hours per day within 4 years
5. **Site Supervisor:** AA Degree with 24 units in Early Child 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.



### Child Development 50

#### ***Special Topics in Child 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 Child 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.

### Child Development 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 Child 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.*

### Child Development 99abc

#### ***Independent Study***

*1-3 units; hours to be arranged*

*Enrollment Limitation: two courses in Child Development with a minimum grade of B in each and the recommendation 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 early childhood education not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned early childhood education projects (60 hours per unit).

*Note: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)*

### 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 influences 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, educational 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 parenting styles, schooling, roles of teachers, peers, the media, children with special needs, cultural influences on behavior, child abuse, neglect, and social policy.

*Note: This is a core course for all teachers and assistants in early childhood programs regulated by the State of California.*

### 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.

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

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**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.

*Note: Letter grade or P/NP option**Note: This course satisfies the pediatric CPR and first aid requirements for child care programs under current Title 22 regulations.**Note: This course is repeatable.***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*

In this course, students will examine guidance techniques as they apply to children from birth to age twelve in individual and group settings. Students will analyze, through observation and research, common behavioral issues and the possible underlying influences on behavior. The role of the teacher in promoting an environment which fosters appropriate behavior will be examined. Students will be required to conduct observations in local school programs.

**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 six in diverse settings. Emphasis will be placed on facilitating creativity, self expression, and concept and skill development through the use of art media such as paint, clay, collage, chalk and woodworking. Methods for adapting creative art experiences for children with special needs will be discussed. The course is designed for teachers in training and teachers in service needing to develop and refine skills in understanding, planning, and implementing curriculum. Students will be required to participate in one structured activity related to children and/or professional development outside of class hours.

**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 six. Activities, such as group singing, rhythmic experiences, perceptual motor, and creative movement, which foster the child's cognitive, psychosocial, and physical development will be presented. Methods for adapting music and movement experiences for children with special needs will be discussed. This course is designed for teachers in training and teachers in service needing to develop or refine skills in planning and implementing music and movement curriculum. Students will be required to participate in one structured activity related to children and/or professional development outside of class hours.



### 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 six. Students will develop activities that foster children's natural curiosity about scientific and mathematical concepts. These activities will be designed to encourage exploration, experimentation, problem solving, and discovery. Methods for adapting science and math experiences for young children with special needs will also be discussed. This course is designed for teachers in training and teachers in service needing to develop or refine skills in understanding, planning, and implementing developmentally appropriate science and math curriculum. Students will be required to participate in one structured activity related to children and/or professional development outside of class hours.

### 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 six. Appropriate activities for expressive and receptive language development such as storytelling, dramatic play, listening, and emergent literacy will be examined. Methods for adapting language experiences for children with special needs will be discussed. This course is designed for teachers in training and teachers in service needing to develop or refine skills in planning and implementing language arts curriculum. Students will be required to participate in one structured activity related to children and/or professional development outside of class hours.

### 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 theories 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 per week 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 per week 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.

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

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**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 week 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 week 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 week 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 week 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 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 Nursing 116.*

### **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 per week 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.

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

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**Child Development 170B****Family Development II**

3 units; 3 hours lecture

*Prerequisite: Child Development 170A with a minimum grade of C*

Credit, degree applicable

Transfer CSU

This is the second 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. In this course, students will continue to develop and practice skills needed to provide strength-based support for families in their communities. Topics will include building and establishing relationships, personal safety, collaboration, accessing specialized services home visiting, and the local, state and national policies that affect families and the implementation of Family Development Plans. Students will complete a portfolio to document their ability to assist families in achieving long-term sustained change.

**Chinese****Chinese 1****Elementary Chinese I**

4 units; 5 hours lecture

*Recommended Preparation: eligibility for English A*

Credit, degree applicable

Transfer CSU, UC

This beginning course, taught within the context of Chinese culture, introduces students to listening, speaking, reading, and writing elementary Mandarin Chinese. Students develop pronunciation and speaking skills along with their understanding of spoken Chinese. Audio and video tapes are available to reinforce the language skills students acquire in the classroom.

*Note: This course is comparable to two years of high school Chinese.*

**Chinese 2****Elementary Chinese II**

4 units; 5 hours lecture

*Prerequisite: Chinese 1 with a minimum grade of C or equivalent*

Credit, degree applicable

Transfer CSU, UC

This course, taught within the context of Chinese culture, is a continuation of the study of elementary Mandarin Chinese with an emphasis on listening, speaking, reading, and writing. Students improve their pronunciation and speaking skills along with their understanding of spoken Chinese. 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 Chinese.*

**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

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: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)*



# COMMUNICATION STUDIES

## A.A. Degree

Fine Arts Division

[www.elcamino.edu/academics/finearts](http://www.elcamino.edu/academics/finearts)

The degree provides students with a thorough foundation in the theory and practice of communication studies. This is achieved through a variety of courses that serve to develop personal, business, and professional communication skills in individual, interpersonal, and group situations, along with skills in research, organization, critical thinking, argumentation, and forensics. Students will demonstrate their proficiency through performance, class projects, research papers, objective tests, critiques, and competitions. Program assessment is measured by completion, evaluation of student learning outcomes, transferability, competitions at the local, state, and national levels, and periodic program review.

### 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 1

(formerly Speech Communication 1)

#### **Public Speaking**

3 units; 3 hours lecture

*Recommended Preparation:* eligibility for English 1A

*Credit, degree applicable*

*Transfer CSU, UC*

In this course students will compose, present, and evaluate original speeches. Emphasis is placed on audience analysis, topic selection, research, evidence, organization, delivery, and critical analysis of persuasive communication. Students are required to attend out-of-class speaking events.

### Communication Studies 3

(formerly Speech Communication 3)

#### **Small Group Communication**

3 units; 3 hours lecture

*Recommended Preparation:* eligibility for English 1A

*Credit, degree applicable*

*Transfer CSU, UC*

In this course student will plan and participate in a variety of group projects such as panel and symposium discussions. Topics to be covered include decision making, role identification, interpersonal needs within a group, team participation, appropriate interdependency on group members, effective leadership skills, cohesiveness, conflict resolution and professional presentation styles.

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

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### Communication Studies 4

(formerly Speech Communication 4)

#### **Argumentation and Debate**

3 units; 3 hours lecture

*Credit, degree applicable*

*Transfer CSU, UC*

This course introduces students to the construction of arguments for debate and other speech presentations. Emphasis is placed on analyzing claims, developing arguments that support and refute propositions, and effective delivery. Identification of types of argument and fallacies of reasoning are explored. Controversial issues are discussed, researched, and debated.

### 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

(formerly Communications 1abcd)

#### **Student Leadership**

2 units; 1 hour lecture, 2 hours lab per week 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 7

(formerly Speech Communication 7)

#### **Voice, Articulation and Pronunciation**

3 units; 3 hours lecture

*Credit, degree applicable*

*Transfer CSU, UC*

In this course, students examine the use of spoken Standard American English. Emphasis is placed on personal improvement of spoken English through drills utilizing the International Phonetic Alphabet. Also included is an overview of the physiological processes of speech and other forms of spoken English.

### Communication Studies 8

(formerly Speech Communication 8)

#### **Oral Interpretation of Literature**

3 units; 3 hours lecture

*Recommended Preparation:* eligibility for English 1A

*Credit, degree applicable*

*Transfer CSU, UC*

In this course, students will study how to orally interpret literature through reading poetry, drama, short stories, and essays. Emphasis will be placed on the techniques of exploring, illuminating, and orally presenting the logical, emotional, and aesthetic meanings of literature.

**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, UC*

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, UC*

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 Theatre. 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 are coordinated with assigned Speech Communication projects (60 hours per unit).

*Note: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)*

## COMPUTER RELATED PROGRAMS

*El Camino College offers courses in Computer Applications in Industry, Computer Information Systems, and Computer Science.*

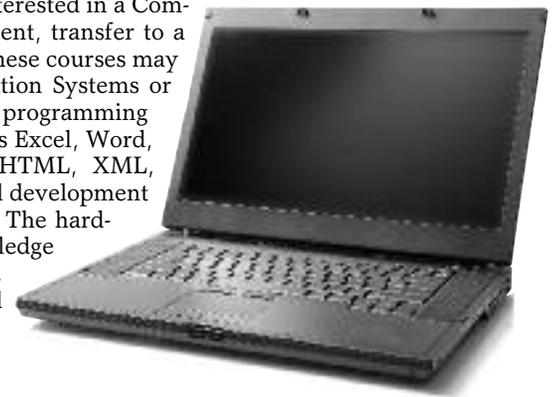
### Computer Applications in Industry

The Industry and Technology Division offers a number of courses in computer applications for industry such as, Architecture, Computer and Electronics, and Engineering Technology. Training opportunities are offered in design and drafting in two-dimensional and three-dimensional software, manufacturing, and Computer Numeric Control (CNC) programming. The programs are designed to prepare students for employment with the technical skills required in today's competitive workplace.

For additional computer application courses in Industry and Technology, see Architecture, Computer Aided Design/Drafting, Electronics, Engineering Technology, Fashion (computer fashion illustration and patternmaking), and Machine Tool Technology in the college course listings. Students interested in Computer Hardware Technology, should refer to additional 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 Visual Basic.NET, ASP.NET, and C#; application packages such as Excel, Word, Access, and PowerPoint; scripting and mark-up languages such as HTML, XHTML, XML, JavaScript and AJAX; networking certification such as Cisco. Operating systems and development tools include Windows 7, Visual Studio 2010, SQL Server Express and Visio 2010. 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 Science 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, Engineering, Mathematics, Physics or another technical discipline. The courses may also serve working professionals in computer or technical industries who wish to enhance their experience in computer programming and software concepts. Courses offered provide instruction in high-level languages, including C++ and Java, and advanced programming concepts.

## COMPUTER AIDED DESIGN/DRAFTING

### A.S. Degree and Certificates of Achievement and Accomplishment

*Industry and Technology Division  
www.elcamino.edu/academics/indtech*

The computer aided design/drafting program prepares students for employment in career fields utilizing computer aided drafting (CAD) processes and provides upgrade opportunities for currently employed personnel. By completing the degree or certificate requirements, the student will gain proficiency in sketching, manual and CAD fundamentals, three dimensional design and modeling, and geometric dimensioning and tolerancing. Competencies will be assessed regularly by student performance using industry standard computer hardware and software. Students completing the program may expect to enter industry as CAD draftsman in mechanical, electronic, or related industrial fields.

#### 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\*, 43 45, Technical Mathematics 1;  
one course from: Electronics and Computer Hardware Technol-

ogy 11, 22, Machine Tool Technology 16ab, 46, 101abcd, Welding 15ab\*, Art 141abcd\*, 144abcd\*, Computer Information Systems 13 (\*one semester)  
Total Units: 29.5-30.5

#### 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\*, 43 45, 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: 29.5-30.5

#### 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 5*****Introduction to Mechanical Drafting***

3 units; 2 hours lecture, 4 hours lab

Credit, degree applicable

Transfer CSU

This introduction to mechanical drafting covers the basics of creating technical drawings using traditional manual drafting instruments and sketching and Computer Aided Design/Drafting (CADD) using AutoCAD software. Topics include lettering, sketching multiview drawings, geometric construction, computer and orthographic CADD, Two Dimensional (2D) and basic Three Dimensional (3D) computer drawings, threads and fasteners and working and assembly drawings using CADD software.

**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.

**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

In this course, students develop more advanced solid and surface modeling techniques available within CATIA\* software with emphasis on its assembly development aspects. (\*CATIA is a registered trademark of Dassault Systems.) Functions of the part design, generative shape, and drafting modules are also covered in depth.

**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

Recommended Preparation: Computer Aided Design/Drafting 32abcd or equivalent

Credit, degree applicable

Transfer CSU

This course explores the Functional Dimension and Tolerance (FD&T) aspects of the CATIA\* software as well as the "knowledge", 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.

**Computer Aided Design/Drafting 37abcd*****Advanced CATIA Functions***

2 units; 1 hour lecture, 3 hours lab

Prerequisite: one semester of 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.

**Computer Aided Design/Drafting 43*****Design Process and Concepts***

4.5 units; 3 hours lecture, 5 hours lab

Prerequisite: Computer Aided Design/Drafting 5 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

This advanced design and drafting course addresses the processes of product design, from concept through final production drawings, and focuses on the documentation requirements for each step of these processes: design requirements definition, conceptual design, design evaluation/refinement, preliminary design, detail design, final production documentation. Industry practices are stressed throughout the course as students develop skills in conceptual sketching, orthographic projection, dimensioning and tolerancing, and drawing notes. Research, planning and sketching are done manually, while formal drawings are prepared on a personal computer utilizing appropriate Computer Aided Design/Drafting (CADD) software.

**Computer Aided Design/Drafting 45*****Geometrical Dimensioning and Tolerancing***

3 units; 3 hours lecture

Credit, degree applicable

Transfer CSU

This course covers the application and interpretation of Geometric Dimensioning and Tolerancing (GD&T) as prescribed by the American Society of Mechanical Engineers, ASME Y14.5M 2009 standard. It includes tolerance zone generation and interpretation using Maximum Material Condition (MMC), Least Material Condition (LMC), and Regardless of Feature Size (RFS) principles. Also covered are datum referencing and simulation, tolerances of form, orientation, runout, position and bonus tolerances. This course emphasizes the identification and use of datums and positional tolerances.

### 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 provided 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: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)*

## Computer Hardware Technology

### See Electronics and Computer Hardware Technology



# COMPUTER INFORMATION SYSTEMS

## A.S. Degree and Certificates of Achievement

*Business Division*

*[www.elcamino.edu/academics/business](http://www.elcamino.edu/academics/business)*

The program is intended for students interested in information systems and can lead to a degree or certificate of achievement, and career placement or advancement. A variety of courses will enable students to design graphical user interfaces, perform systems analysis, develop Web pages, spreadsheets, and databases, and implement and maintain LANs (local area networks). Students will demonstrate their proficiency through performance in laboratory exercises and objective examinations. Program assessment is measured by program completion and periodic program review. The program leads to career opportunities as software specialists, Web programmers, database developers, systems analysts, or network administrators.

### 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 13, 18, 26, 28, 40;

one course from: Computer Information Systems 16 or 133;

two courses from: Computer Information Systems 27, 29, 133, 134;

two courses from: Business 55, Computer Information Systems 11, 19, 30

Total Units: 30-34

Microcomputer Support and Network Management: 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 33-34 units.

Computer Information Systems 13, 19, 40, 140, 141, 142, 143;

four courses from the following: Computer Information Systems 16, 18, 28, 29, 80

Total Units: 33-34

### 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 will be introduced to the capabilities of the computer using file management, wordprocessing, and spreadsheets in a hands-on environment. Operation of the computer as a general purpose tool will be stressed.

*Note: Letter grade or P/NP option.*

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

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**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 Information Systems 16****Introduction to Visual Basic**

3 units; 2 hours lecture, 2 hours lab

*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 programming. 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.

**Computer Information Systems 18****Systems Analysis and Design**

3 units; 2 hours lecture, 2 hours lab

*Recommended Preparation:* Computer Information Systems 13 or equivalent experience

Credit, degree applicable

Transfer CSU

In this course the student will study structured systems analysis, design, and development as applied to business data processing. Topics emphasize tools of the analyst and the systems development life cycle, which includes problem definition, feasibility study, analysis, process modeling, data modeling, logic modeling, software development choices, and implementation and maintenance of systems.

**Computer Information Systems 19****Introduction to the Internet and Web Publishing**

3 units; 2 hours lecture, 2 hours lab

*Prerequisite:* Computer Information Systems 13 with a minimum grade of C or equivalent experience

Credit, degree applicable

This course covers terminology, technology, and software used by the Internet and Web Page Publishing. Different technologies will be compared and evaluated. Students will learn to set up Web pages, use email, search for and evaluate information sources, and use the various conferencing software available on the Internet.

**Computer Information Systems 20****Microsoft Windows**

1 unit; 0.5 hour lecture, 1 hour lab

Credit, not degree applicable

This course focuses on the use and maintenance of a Windows based computer system and prepares students to set up and protect their home or office computer. Topics include establishing a multi-user environment, setting restore points, backups, disk defragmenting, and protection from spy ware.

*Note:* Letter grade or P/NP option.

**Computer Information Systems 26****Using Spreadsheets**

3 units; 2 hours lecture, 2 hours lab

*Recommended Preparation:* Computer Information Systems 13 or equivalent experience

Credit, degree applicable

Transfer CSU

In this course students learn to use spreadsheets to solve business and information system problems in a graduated series of laboratory projects. The database, graphics features, macros, and advanced logical and financial functions of spreadsheets are utilized. The student will create and enhance charts, work with multiple worksheets and integrate spreadsheets with other Windows applications.

**Computer Information Systems 27****Using Spreadsheet Macros**

3 units; 2 hours lecture, 2 hours lab

*Recommended Preparation:* Computer Information Systems 26 or 68 or the ability to construct spreadsheets; Computer Science 5, 10, 20, 25 or 30; or experience in a computer programming language

Credit, degree applicable

Transfer CSU

This course covers macros and the command language structure required to automate spreadsheet operations. The student progresses through a complex series of lab exercises to develop the skills required for general business productivity.

**Computer Information Systems 28****Using Database Applications**

3 units; 2 hours lecture, 2 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/lab 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.*

### Computer Information Systems 99abc

#### **Independent Study**

1-3 units; hours to be arranged

*Enrollment Limitation:* two courses in Computer Information Systems with a minimum grade of B in each and 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 the field of Computer Information Systems not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Computer Information Systems projects (60 hours per unit).

*Note: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)*

### 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 internetworks. Students will learn to design and build a multi-router and multi-group internetwork that use local and wide area network interfaces for the most commonly used routing and routed protocols.

Note: Letter grade or P/NP option.

**COMPUTER SCIENCE****A.S. Degree and Certificate of Achievement**

Mathematical Sciences Division

[www.elcamino.edu/academics/mathsciences](http://www.elcamino.edu/academics/mathsciences)

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 following 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 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.

### 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.

### Computer Science 99abc

#### **Independent Study**

1-3 units; hours to be arranged

Enrollment Limitation: completion of two courses in Computer Science with a minimum grade of B in each course and acknowledgment by the instructor with whom the student will work

Credit, degree applicable

Transfer CSU – limitations apply

This course provides special advanced studies in a subject field of Computer Science not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned computer laboratory and research projects (60 hours per unit).

Note: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)

# CONSTRUCTION TECHNOLOGY

## A.S. Degree and Certificates of Achievement

Industry and Technology Division  
[www.elcamino.edu/academics/indtech](http://www.elcamino.edu/academics/indtech)

By completing the degree or certificate requirements, students acquire proficiency in basic residential construction techniques and in analyzing, evaluating, and providing solutions for a variety of job site situations. Students will be able to interpret blueprints, estimate materials, lay out, and construct a basic residential structure in accordance with Uniform Building Code requirements. Competencies are assessed regularly by student performance in the construction technology laboratory. The program provides career opportunities in various aspects of construction, including carpentry, cabinetmaking, furniture making, a variety of sub-crafts, 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 50

#### Special Topics in Construction 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 Construction 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.

### Construction 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 Construction Technology field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

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

### 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: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)

### 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, construction mathematics, house layout, blueprint reading, formwork, use of leveling instruments and estimating. Practical instruction is given in the use of tools and materials through construction laboratory work.

**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 rafters, International Residential Code (IRC) requirements, roof construction and estimating. Practical instruction is given in the use of tools and materials through construction laboratory work.

**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, dry-wall 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.



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

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**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.

**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 hours 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**

## COSMETOLOGY

### A.S. Degree and Certificates of Achievement and Accomplishment

Industry and Technology Division  
www.elcamino.edu/academics/indtech

The cosmetology program offers students to 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 of 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 2abcd\* (\*minimum two semesters), 12, 13  
complete 9 units from: Cosmetology 2abcd\* (\*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 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.

#### Cosmetology 3

##### *Advanced Cosmetology Applications*

5 units; 4 hours lecture,  
28 hours lab (8 week course)  
Prerequisite: Cosmetology 1 with a minimum grade of C or 399 hours from a State approved cosmetology program  
Credit, degree applicable

This course explores the study of advanced principles and practical operations of cosmetology equipment, procedures and techniques. It is designed as an intensive, multi-disciplinary class which focuses on the most common cosmetology processes. Lectures center on the advanced theories of the practice of cosmetology and application. Laboratory work is designed to support the advanced cosmetology student with an intensive forum for development of advanced cosmetology skills, techniques, safety practices and sanitation procedures.

#### Cosmetology 4

##### *Cosmetology Practicum*

4 units; 2 hours lecture, 10 hours lab  
Prerequisite: Cosmetology 1 or Cosmetology 10 with a minimum grade of C  
Credit, degree applicable

This course is designed for the student who is in need of receiving hours toward their State Board of Cosmetology requirement. The focus of this class is on the advanced principles and practical operations of cosmetology equipment, procedures and techniques.

*Note: This course is repeatable.*

**Cosmetology 5ab****Evening Cosmetology Practicum**

2 Units; 1 hour lecture, 5 hours lab

*Prerequisite:* Cosmetology 1 or Cosmetology 10 and Cosmetology 11 with a minimum grade of C in each prerequisite course

*Credit, degree applicable*

This course is designed for the student who is in need of receiving hours toward their State Board of Cosmetology requirement. The focus of this course is on the advanced principles and practical operations of cosmetology equipment, procedures and techniques.

**Cosmetology 10****Introduction to Cosmetology I**

6.5 units; 4 hours lecture, 14 hours lab

*Recommended Preparation:* eligibility for English 84

*Credit, degree applicable*

*Transfer CSU*

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.

*Note: Students who have earned credit in Cosmetology 1 cannot receive unit credit for Cosmetology 10.*

**Cosmetology 11****Introduction to Cosmetology II**

6.5 units; 4 hours lecture, 14 hours lab

*Prerequisite:* Cosmetology 10 with a minimum grade of C or equivalent

*Credit, degree applicable*

*Transfer CSU*

This is the second of a two-course introductory series covering the principles and practical operations of cosmetology techniques, procedures, and equipment for wet and thermal styling, permanent waving, chemical straightening, hair coloring, scalp 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.

*Note: Students who have earned credit in Cosmetology 1 cannot receive unit credit for Cosmetology 11.*

**Cosmetology 12****Intermediate Cosmetology**

6.5 units; 4 hours lecture, 14 hours lab

*Prerequisite:* Cosmetology 11 with a minimum grade of C

*Credit, degree applicable*

*Transfer CSU*

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, 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.

**Cosmetology 13****Advanced Cosmetology I**

6.5 units; 4 hours lecture, 14 hours lab

*Prerequisite:* Cosmetology 12 with a minimum grade of C

*Credit, degree applicable*

*Transfer CSU*

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, 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.

**Cosmetology 14abcd****Advanced Cosmetology II**

6.5 units; 4 hours lecture, 14 hours lab

*Prerequisite:* Cosmetology 13 with a minimum grade of C

*Credit, degree applicable*

*Transfer CSU*

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, 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.

**Cosmetology 16abcd****Cosmetology Applications**

3 units; 1.5 hours lecture, 7.5 hours lab

*Prerequisite:* Cosmetology 1 or 10 with a minimum grade of C in prerequisite or equivalent

*Credit, degree applicable*

*Transfer CSU*

This course covers the study of intermediate principles, procedures, techniques, and practical operations of cosmetology equipment. It is designed as an intensive, multidisciplinary workshop in the most common cosmetology processes. Lectures center on the theories of the practice of cosmetology and their application. Laboratory work is designed to provide the student with a forum for development of intermediate cosmetology skills, techniques, safety practices and sanitation procedures.

**Cosmetology 50****Special Topics in Cosmetology**

*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 Cosmetology 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.

**Cosmetology 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 Cosmetology field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

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

**Cosmetology 99abc****Independent Study in Cosmetology**

1-3 units; hours to be arranged

*Enrollment Limitation:* two courses in Cosmetology with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work

*Credit, degree applicable*

This course provides special advanced studies in a subject field of Cosmetology not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Cosmetology projects (60 hours per unit).

*Note: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)*

**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****A.A. Degree***Fine Arts Division**www.elcamino.edu/academics/finearts*

The degree provides students with a comprehensive foundation in the theory, history, technique, and art of dance. This is fulfilled through a structured program of dance study in the areas of core techniques, historical and contemporary styles, choreography, performance, and dance history. Students will demonstrate their proficiency through technical, interpretive, and expressive competency, research papers, essays, and public performances. Program assessment is measured by public performances, program completion, transferability, and periodic program review. Students qualify to pursue a variety of dance-related careers and advanced degree options.

**El Camino College Major Requirements**

Theory: Dance 3, 5, 70abcd, 71ab

Technique: Dance 32ab, 42ab; 8 units from: Dance 22ab\*, 23abcd\*, 25abcd, 26abcd, 33abcd, 35abcd, 43abcd, 72abcd; 4 units from: Dance 83abcd, (can be taken a maximum of 3 semesters for major credit), 87abcd\*\*, 89abcd; 3 units from Dance 9ab, 10, 12abcd, 14ab, 16ab, 17abcd, 18ab, 21abcd, 51ab, 52abcd, 53ab, 54abcd, 61ab, 62abcd

Total Units: 28

It is essential that the transfer student see a counselor for appropriate curriculum.

\*Some colleges and universities may not accept jazz courses toward the major.

\*\*Students are advised that at least one semester of Dance 87abcd is required for transfer students.

**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.

**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.

*Note: Letter grade or P/NP option.***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.***Dance 17abcd*****Intermediate African Dance****2 units; 1 hour lecture, 3 hours lab**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****2 units; 1 hour lecture, 3 hours lab**Credit, degree applicable**Transfer CSU, UC*

This course is an introduction to basic dance techniques and terminology. It includes segments on body alignment, flexibility, strength, coordination and combinations common to ballet, jazz and modern dance. Attendance is required at selected dance events.

*Note: Letter grade or P/NP option.***Dance 20abcd*****Body Conditioning for Dance Techniques****1 unit; 3 hours lab**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. Muscle 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****2 units; 1 hour lecture, 3 hours lab**Credit, degree applicable**Transfer CSU, UC*

This course covers the concepts and exercises developed by Joseph H. Pilates. Emphasis is placed on mat work that features exercises for improving body alignment, strength, flexibility, muscle control, coordination, and breathing. Exercises are designed to enhance dance technique and performance as well as to help the dancer prevent injuries.

*Note: Letter grade or P/NP option.***Dance 22ab*****Jazz Dance I****2 units; 1 hour lecture, 3 hours lab**Recommended Preparation: 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****2 units; 1 hour lecture, 3 hours lab**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****2 units; 1 hour lecture, 3 hours lab**Prerequisite: one semester of Dance 23abcd with a minimum grade of C**Recommended Preparation: Dance 32ab**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****2 units; 1 hour lecture, 3 hours lab**Credit, degree applicable**Transfer CSU, UC*

In this course students are introduced to various forms of Hip Hop dance. The history, vocabulary, social, and theatrical codifications of Hip Hop dance are also explored.

*Note: Letter grade or 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.

### 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 at selected dance events is required.

*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*

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.

*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 20<sup>th</sup> 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 at selected dance events is required.

*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 20<sup>th</sup> 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.

**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 or equivalent

Credit, degree applicable

Transfer CSU, UC

In this course, students continue studying Tap Dance. Students will refine basic tap dance skills and learn more complex tap combinations that incorporate a variety of rhythms and styles. Attendance at selected dance events is required.

**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: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)

**Drafting Technology****See Computer Aided Design/Drafting**

## ECONOMICS

### A.A. Degree

Behavioral and Social Sciences Division  
[www.elcamino.edu/academics/behavioralsocial](http://www.elcamino.edu/academics/behavioralsocial)

The degree in economics is designed to provide students with a foundation in macroeconomics and microeconomics theory. Economics majors will acquire knowledge of the principle economic models for understanding how the national economy functions, the fundamental laws of supply and demand, and international trade theory. Students will be able to apply methodologies to assess fiscal and monetary policy, price levels, and the allocation of goods and resources in competitive and monopolistic markets. Competencies will be assessed through regularly scheduled objective and essay examinations and problem solving assignments.

#### 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 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.

#### 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: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)

## Education

#### Education 101

##### **Introduction to the Field of Education**

1 unit; 1 hour lecture

Credit, degree applicable

Transfer CSU, UC

This course is designed to help students explore a variety of careers in education and to prepare them for future studies in the field. Course topics include the qualities of effective teachers and other school professionals as well as the challenges and rewards of various careers in education. Types of credentials and credential programs, subject area coursework, state examinations, educational and technological resources, state standards, and professional portfolios will be discussed. Throughout the course, students will also conduct off-site observation.

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

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**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.

**Educational 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

**Educational Development 10abcd*****English Grammar for Deaf and Hard-of-Hearing Students***

3 units; 3 hours lecture, 1 hour lab

*Credit, not degree applicable*

This course introduces deaf and hard-of-hearing student 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

*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 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; 3 hours lecture

*Recommended Preparation:* eligibility for English 84

*Credit, degree applicable*

*Transfer CSU*

This course is designed to help students develop a better understanding of personal motivation as they establish short and long-term goals. Students will also explore their personal value system, the concepts of stress management, defense mechanisms, interpersonal communication, and time management.

*Note:* This course is appropriate for students with disabilities.

**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

*Enrollment Limitation: Concurrent enrollment in an El Camino College English or Mathematics course*

*Credit, not degree applicable*

In this laboratory course, students will increase learning performance and study skills which relate to content of other El Camino College courses. Students will enhance their critical thinking and time management skills. They will evaluate appropriate campus resources and assistive technologies which may promote academic success. Specific sections of the course will be offered to support writing 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 examines the relationship and importance of self-awareness and personal attitude to help students change aspects of their motivation and learning strategies to promote academic performance and college success. The course emphasizes self-management, including various techniques and approaches that facilitate self-awareness, academic confidence, effective study strategies, and learning habits to increase success in college and life.

*Note: This course is appropriate for students with disabilities.*

*Note: Pass/no pass only*

### **Educational Development 33ab**

#### ***Specific Learning Strategies***

3 units; 3 hours lecture

*Credit, not degree applicable*

Students with learning challenges are taught specific techniques, learning systems and strategies which enable them to effectively acquire, integrate, store, and retrieve information to improve learning and test performance for greater college success.

*Note: This course is appropriate for students with disabilities.*

*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*

### **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; 2 hours lecture, 1 hour lab

*Recommended Preparation: minimum typing speed of 5 words per minute*

*Credit, degree applicable*

*Transfer CSU*

This introductory computer course is designed to instruct students with disabilities in the use of assistive computer technology appropriate to the individual's functional limitations. The student will acquire basic computer literacy skills with an emphasis on word processing in the Windows environment.

*Note: Letter grade or P/NP option*

*Note: This course is appropriate for students with disabilities.*

### **Educational Development 41abcd**

#### ***Assisted Computer Technology Laboratory***

1 unit; 3 hours lab per week 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.





## ELECTRONICS AND COMPUTER-HARDWARE TECHNOLOGY

### A.S. Degree and Certificates of Achievement and Accomplishment

Industry and Technology Division  
[www.elcamino.edu/academics/indtech](http://www.elcamino.edu/academics/indtech)

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\*;

two courses from: Electronics and Computer Hardware Technology 95abcd\*, 191ab\*, Computer Information Systems 13, 40 (\* one semester)

Total Units: 29-31

##### Electronics Technology Option:

Electronics and Computer Hardware Technology 11, 22, 110, 120, 122, 124, 130, 140ab\*;

one course from: Electronics and Computer Hardware Technology 95abcd\*, 142ab\*, 144ab\*, 191ab\*, 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 Electronics 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 Electronics Technician:

Electronics and Computer Hardware Technology 11, 22, 110, 130, 140ab\*, 142ab\*, 144ab\*;

two courses from: Electronics and Computer Hardware Technology 95abcd\*, 191ab\*, 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\*, 191ab\*, 192, (\*one semester)

Total Units: 27-30

##### Industrial Computer Control Technician:

Electronics and Computer Hardware Technology 11, 22, 110, 120, 124, 130, 140ab\*, 191ab\*, 192, Machine Tool Technology 10A;

one course from: Electronics and Computer Hardware Technology 95abcd\*, 142ab\* (\*one semester)

Total Units: 34-36

#### Certificate of Accomplishment

A Certificate of Accomplishment will be granted upon the completion of the courses in one of the following options: CompTIA Computer Hardware Technician, Computer Hardware Technician, Electronics Technician, Robotics, or Powerline Industry Readiness. At least 50% of the courses required for the Certificate of Accomplishment must be completed at El Camino College.

##### CompTIA Computer Hardware Technician:

Electronics and Computer Hardware Technology 144ab\*, 146ab\*, 148ab\*

(\*one semester)

Total Units: 12

##### Computer Hardware Technician:

Electronics and Computer Hardware Technology 11, 140ab\*, 142ab\*, 144ab\*

(\*one semester)

Total Units: 15

##### Electronics Technician:

Electronics and Computer Hardware Technology 11, 22, 110, 120, 140ab\* (\*one semester)

Total Units: 16

##### Robotics:

Electronics and Computer Hardware Technology 11, 22, 130, 191ab\*, 192 (\* one semester)

Total Units: 16

##### Powerline Industry Readiness:

Construction Technology 172, Electronics and Computer Hardware Technology 62, 64, 68, 110

Total Units: 14

### 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 62

#### ***Introduction to the Electric Power Industry***

2 units; 2 hours lecture

Credit, degree applicable

Transfer CSU

In this course, students are introduced to electric power generation and transmission. Topics will emphasize employment opportunities in the powerline industry. The course will include a general overview of the types of power systems, electricity generation, basic electrical theory, history of power generation and distribution, power system protection, system reliability, and power industry governance.

Note: Letter grade or P/NP option.



### Electronics and Computer Hardware Technology 64

#### ***Electric Power Industry Safety***

2 units; 2 hours lecture

Credit, degree applicable

Transfer CSU

This course addresses OSHA (Occupational Safety and Health Administration) regulations for the electric power generation and distribution industry. The topics covered include OSHA regulations for the utility industry, personal protective equipment, fall protection, hazardous material handling, fire protection, hand and power tools, and electrical distribution safety components. Students successfully completing the course will be eligible to take the examination for the OSHA (30 hour) safety-training certificate.

Note: Letter grade or P/NP option.

### 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 99abc

#### ***Independent Study***

1-3 units; hours to be arranged

Enrollment Limitation: two courses in Electronics and Computer Hardware Technology with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work

Credit, degree applicable

Transfer CSU - limitations apply

This course provides special advanced studies in a subject field of Electronics and Computer Hardware Technology not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Electronics and Computer Hardware Technology projects (60 hours per unit).

Note: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)

### Electronics and Computer Hardware Technology 110

#### ***Introduction to Direct and Alternating Current Circuits***

3 units; 2 hours lecture, 4 hours lab

Prerequisite: Electronics and Computer Hardware Technology 11 with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course examines advanced topics in the foundational principles of direct and alternating current electricity through the correlation of theory with laboratory experiments. Basic circuit analysis forms the core of the course. Included in this class are the use of calculators; computer circuit simulation and many types of electrical/electronic test equipment to make electrical measurements; and yield analysis.

**Electronics and Computer Hardware Technology 112**
***Advanced Direct and Alternating Current Circuits***

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 teaches advanced principles of direct and alternating current electricity through the correlation of theory with laboratory experiments. Circuit analysis forms the core of the course. Included are the analysis of complex series-parallel resistor circuits, circuit analysis theorems, and the application of trigonometry to current, voltage, impedance, and power data. Other practical topics include the theory of electric meter operation and the analysis of series-parallel impedances.

**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.

**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.

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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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**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**

(formerly Electronics and Computer Hardware Technology 140)

***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**

(formerly Electronics and Computer Hardware Technology 142)

***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**

(formerly Electronics and Computer Hardware Technology 144)

***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 A+ Certification Hardware exam. Topics covered include safety, basics of electricity and electronics, micro-computer hardware and components, Complementary Metal Oxide Semiconductor (CMOS) settings, operating systems, printers, portable systems and network hardware.

*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**  
(formerly Electronics and Computer Hardware Technology 191)

**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 trouble shooting.

**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

[www.elcamino.edu/academics/indtech](http://www.elcamino.edu/academics/indtech)

The engineering technology program prepares students for transfer to university engineering technology programs and for employment in technical fields. By completing the degree or certificate requirements, students acquire a foundation in the principles of engineering, engineering design, digital electronics, automated manufacturing, and the application of math and science in technical fields. Careers in engineering technology involve high level technical work in the creation, production, utilization, and distribution of industrial materials, products, and processes. Competencies will be assessed regularly in accordance with skill standards established by the National Alliance for Pre-engineering Programs.

**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: 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

# 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 orientation to the preparation, training, practice, obligations and ethics of the engineering profession, as well as an introduction to the various engineering disciplines. Speakers from various fields present opportunities and challenges in the engineering profession. Academic success strategies related to the study of engineering are emphasized.

### 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 engineering 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.

### Engineering Technology 10A

#### **Principles of Engineering Technology I**

1.5 units; 1 hour lecture, 2 hours lab

Credit, degree applicable;

Transfer CSU

This is the first of two courses in which students will explore technology systems and engineering processes to learn how math, science, and technology impact our society. The topics introduced include the design process, communication, documentation, and engineering systems.

Note: The two course sequence Engineering Technology 10A and 10B is the same as Engineering Technology 10.

### Engineering Technology 10B

#### **Principles of Engineering Technology II**

1.5 units; 1 hour lecture, 2 hours lab

Recommended Preparation: Engineering Technology 10A

Credit, degree applicable;

Transfer CSU

This is the second of two courses in which students will explore technology systems and engineering processes to learn how math, science, and technology impact our society. The topics introduced include statics, properties of materials, quality assurance, materials testing, and engineering for reliability.

Note: The two course sequence Engineering Technology 10A and 10B is the same as Engineering Technology 10.

### Engineering Technology 12

#### **Introduction to Engineering Design**

3 units; 2 hours lecture, 4 hours lab

Recommended Preparation: Engineering Technology 10

Credit, degree applicable

Transfer CSU

In this course, students will gain a basic understanding of the design process used in engineering fields and the application of computer modeling software. Emphasis is placed on the design process, geometric relationships, visualization, technical sketching, modeling, model documentation, assemblies, and production processes.

### Engineering Technology 12A

#### **Introduction to Engineering Design I**

1.5 units; 1 hour lecture, 2 hours lab

Credit, degree applicable;

Transfer CSU

This is the first of two courses in which students will gain a basic understanding of the design process used in engineering fields and the application of computer modeling software. Emphasis is placed on the design process, geometric relationships, visualization, and technical sketching.

Note: The two course sequence Engineering Technology 12A and 12B is the same as Engineering Technology 12.

### Engineering Technology 12B

#### **Introduction to Engineering Design II**

1.5 units; 1 hour lecture, 2 hours lab

Recommended Preparation: Engineering Technology 12A

Credit, degree applicable;

Transfer CSU

This is the second of two courses in which students will gain a basic understanding of the design process used in engineering fields and the application of computer modeling software. Emphasis is placed on, modeling, model documentation, assemblies, and production processes.

Note: The two course sequence Engineering Technology 12A and 12B is the same as Engineering Technology 12.

### Engineering Technology 14

#### **Electronics for Engineering Technologists**

3 units; 2 hours lecture, 4 hours lab

Recommended Preparation: Engineering Technology 10

Credit, degree applicable

Transfer CSU

In this course, students are introduced to the application of electronics in engineering technology. The topics studied include safety, Ohm's Law, engineering notation, DC circuits, capacitance, inductance, reactance, impedance, analog and digital waveforms, basic motors, number systems, logic gates, Boolean algebra, flip-flops, shift registers, and micro-processors. Techniques in computer simulation and electrical measurements will be stressed.

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

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### Engineering Technology 14A

#### *Electronics for Engineering Technologists I*

1.5 units; 1 hour lecture, 2 hours lab

Credit, degree applicable;

Transfer CSU

This is the first of two courses in which students are introduced to the application of electronics in engineering technology. The topics studied include safety, Ohm's Law, engineering notation, DC circuits, capacitance, inductance, reactance, and impedance. Techniques in computer simulation and electrical measurements will be stressed.

*Note: The two course sequence Engineering Technology 14A and 14B is the same as Engineering Technology 14.*

### Engineering Technology 14B

#### *Electronics for Engineering Technologists II*

1.5 units; 1 hour lecture, 2 hours lab

Recommended Preparation: Engineering Technology 14A

Credit, degree applicable;

Transfer CSU

This is the second of two courses in which students are introduced to the application of electronics in engineering technology. The topics studied include safety, analog and digital waveforms, basic motors, number systems, logic gates, Boolean algebra, flip-flops, shift registers, and micro-processors. Techniques in computer simulation and electrical measurements will be stressed.

*Note: The two course sequence Engineering Technology 14A and 14B is the same as Engineering Technology 14.*



### Engineering Technology 16

#### *Computer Integrated Manufacturing*

3 units; 2 hours lecture, 4 hours lab

Recommended Preparation: Engineering Technology 10 and 12

Credit, degree applicable

Transfer CSU

This course covers the integration of engineering technology principles and automation in manufacturing environments. Students will create three-dimensional designs with modeling software and produce actual components of their designs on computer numerically controlled (CNC) machine tools. Additional topics covered include machine tool operations, simulations, rapid prototyping (RP), robotics, and manufacturing systems.

### Engineering Technology 16A

#### *Computer Integrated Manufacturing I*

1.5 units; 1 hour lecture, 2 hours lab

Recommended Preparation: Engineering Technology 10 or 10A and 10B, Engineering Technology 12 or 12A and 12B

Credit, degree applicable;

Transfer CSU

This is the first of two courses that cover the integration of engineering technology principles and automation in manufacturing environments. The topics covered include machine tool operations, simulations, and robotics.

*Note: The two course sequence Engineering Technology 16A and 16B is the same as Engineering Technology 16.*

### Engineering Technology 16B

#### *Computer Integrated Manufacturing II*

1.5 units; 1 hour lecture, 2 hours lab

Recommended Preparation: Engineering Technology 10 or 10A and 10B, Engineering Technology 12 or 12A and 12B, Engineering Technology 16A

Credit, degree applicable;

Transfer CSU

This is the second of two courses that cover the integration of engineering technology principles and automation in manufacturing environments. Students will create three-dimensional designs with modeling software and produce actual components of their designs on computer numerically controlled (CNC) machine tools. Additional topics covered include simulations, rapid prototyping (RP), and manufacturing systems.

*Note: The two course sequence Engineering Technology 16A and 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.

### Engineering Technology 18A

#### *Engineering Design and Development I*

1.5 units; 1 hour lecture, 2 hours lab

Prerequisite: Engineering Technology 12 or 12A and 12B, Engineering Technology 14 or 14A and 14B, and Engineering Technology 16 or 16A and 16B with a minimum grade of C

Credit, degree applicable;

Transfer CSU

This is the first course in a two course sequence that covers engineering design and development concepts. In this capstone course, 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, and prototyping. Knowledge gained will be applied to a design solution of a problem assigned in the capstone project.

*Note: The two course sequence Engineering Technology 18A and 18B is the same as Engineering Technology 18*

### Engineering Technology 18B

#### *Engineering Design and Development II*

1.5 units; 1 hour lecture, 2 hours lab

Prerequisite: Engineering Technology 18A with a minimum grade of C

Credit, degree applicable;

Transfer CSU

This is the second course in a two-course sequence that covers engineering design and development. In this capstone course, teams of students will work together to design and construct solutions to engineering problems. Emphasis will be placed on testing methods, project construction, project presentation, and professional peer review.

*Note: The two course sequence Engineering Technology 18A and 18B is the same as Engineering Technology 18*

## ENGLISH

### A.A. Degree

Humanities Division

[www.elcamino.edu/academics/humanities](http://www.elcamino.edu/academics/humanities)

The degree program in English develops the student's ability to read both prose and poetry with understanding and discernment. The student will acquire competence in writing college-level expository essays and applying research strategies. The student will also develop interpretive and analytical skills through exposure to a wide range of literature. Competencies will be assessed primarily by evaluating the student's critical thinking abilities as demonstrated through written work. Completion of the program prepares the English major for any profession or industry requiring strong communication skills as well as transfer.

#### 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, 38ab

Total Units: 22

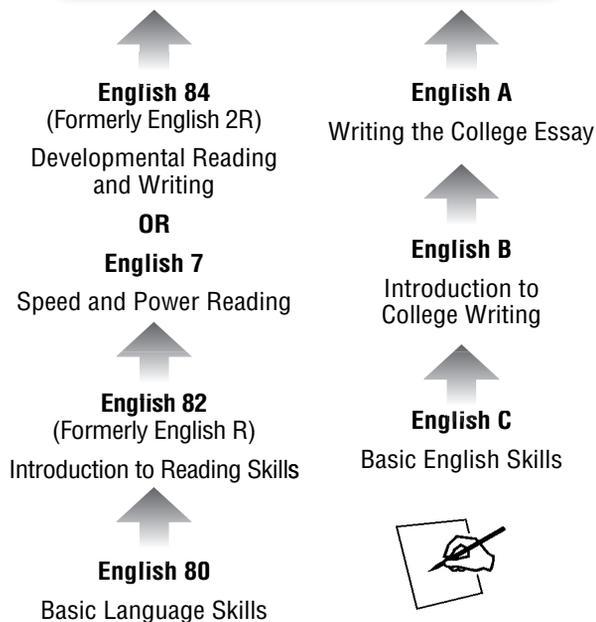
#### Preparation for the Transfer Major

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 Course Sequence Leading to:

## ENGLISH 1A

### Reading and Composition



#### English 80

##### **Basic Language Skills**

3 units; 3 hours lecture, 1 hour lab

*Recommended Preparation:* qualification by testing (English Placement Test) and assessment

*Credit, not degree applicable*

This course is designed to improve reading and study skills necessary for college success. Special emphasis will be placed on reading comprehension, strategies for understanding written words, study and test taking skills, and vocabulary expansion. As writing is a natural extension of the reading process, students also will learn the basic structure of sentences and will learn to recognize main ideas, relationships between main ideas and supporting detail, and patterns of organization in various types of reading material.

*Note: Pass/no pass only*

#### English 82

##### **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

##### **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 C

##### **Basic English Skills**

3 units; 2 hours lecture, 2 hours lab

*Recommended Preparation:* qualification by testing (English Placement Test) and assessment

*Credit, not degree applicable*

This course introduces students to the basic principles of grammar and sentence structure. Students develop clear, concise sentences and write short paragraphs based on brief reading assignments, observations, and experience.

*Note: Pass/no pass only*

## English B

### ***Introduction to College Writing***

3 units; 2 hours lecture, 2 hours lab

*Recommended Preparation: qualification by testing (English Placement Test) and assessment*

*Credit, not degree applicable*

This course introduces students to the processes of creating, developing, and revising paragraphs and short essays based on personal experiences, observations, and reactions to short reading selections. Students learn basic rules of grammar, mechanics, and usage. Students practice a variety of sentence types and paragraph structures. Students revise their writing with the assistance of weekly one-on-one tutorials.

*Note: Pass/no pass only.*

## 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 revise their writing using peer review and weekly one-on-one tutorials. Students will review functional grammar and sentence skills and be introduced to techniques of research and documentation.

*Note: Pass/no pass only*

*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 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.

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

**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, as well as 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 Brownings, the Brontës, 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

The 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.

**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

In this course students examine 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, thriller, and 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, urban fantasy, dystopian, and horror.

**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 surveys various types of science fiction from its nineteenth-century roots to the present. Students will examine the history of science fiction and the cultural contexts that have given rise to its various genres. Students read, analyze, discuss, and evaluate examples of various science fiction genres, including Hard, Social or Soft, Feminist, Cyberpunk, Super- and Transhumanism, Time Travel, Alternate History, Space Adventure, Utopian/Dystopian, Space Opera, Space Western, New Wave, and Steampunk. Other genres related to science fiction may be discussed as well, such as fantasy, gothic, and horror.

### English 27

#### *Children's Literature*

3 units; 3 hours lecture

Recommended Preparation: eligibility for English 1A

Credit, degree applicable

Transfer CSU, UC

This course surveys the historical and cultural development of children's literature and includes critical approaches and the examination of shared themes that cross cultural and geographical boundaries. Students read both classic and contemporary works spanning cultures and time periods and reflect on the significance of a genre written specifically for children.

### 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.

### English 29

#### *The Short Novel*

3 units; 3 hours lecture

Recommended Preparation: eligibility for English 1A

Credit, degree applicable

Transfer CSU, UC

Students discuss and analyze the history, technique, and meaning of the short novel as a distinctive form of fiction and in relationship to the short story and the novel. Students read works by authors of various cultures to gain insight into the development of the short novel genre.

### English 30

#### *The English Bible as Literature*

3 units; 3 hours lecture

Recommended Preparation: eligibility for English 1A

Credit, degree applicable

Transfer CSU, UC

This course is a study of the types of literature used in both the Old and New Testaments of the English Bible. Readings and discussions emphasize analysis of such forms as the short story, poetry, letters, biographical literature, and historical literature.

### English 31

#### *Mythology and Folklore*

3 units; 3 hours lecture

Recommended Preparation: eligibility for English 1A

Credit, degree applicable

Transfer CSU, UC

This course is a survey of Babylonian, Egyptian, Hebrew, Greek, Hispanic, Germanic, Indian, Aboriginal, and other mythologies. Through readings of essays and literature, students explore the similarities and differences of folklore and mythology and identify cultural patterns in the literature.

### English 32abc

#### *Creative Writing: A Workshop in Fiction*

3 units; 3 hours lecture

Prerequisite: English 25A with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course develops advanced skills in the craft of fiction writing. Students discuss and apply complex strategies for constructing characters, establishing conflict, and developing plot within fiction. Students then assess and critique their own and other students' original stories.

Note: Letter grade or P/NP option.

### English 33

#### *Creative Writing: Introduction to Creative Nonfiction*

3 units; 3 hours lecture

Recommended Preparation: eligibility for English 1A

Credit, degree applicable

Transfer CSU, UC

After reading and analyzing, creative nonfiction writings by important writers, students will write creative nonfiction essays based on their own experiences. Students will learn about the genre and the subgenres, 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 34

#### *The Short Story*

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 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 35

#### *World Literature, 3500 BCE to 1650 CE*

3 units; 3 hours lecture

Recommended Preparation: eligibility for English 1A

Credit, degree applicable

Transfer CSU, UC

This course examines masterpieces of world literature from the ancient world through the mid-17th century as both reflections and progenitors of their cultures and, eventually, nations of origin. Students explore the universal concerns of humankind as exemplified through the themes, forms, and trends of the literary works.

**English 36*****World Literature, 1650 CE to Present****3 units; 3 hours lecture**Recommended Preparation: eligibility for English 1A**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 38ab**

(formerly English 38)

***Creative Writing: Screenwriting****3 units; 3 hours lecture**Recommended Preparation: eligibility for English 1A**Credit, degree applicable**Transfer CSU*

In this course students learn the skills necessary to create original feature film screenplays. Themes, character, plot, and dialogue are discussed and developed by means of writing exercises. Script format and story structure are analyzed by reading feature film scripts and discussing produced film stories.

*Note: Letter grade or P/NP option.***English 39*****Literature and Film****3 units; 3 hours lecture**Recommended Preparation: eligibility for English 1A**Credit, degree applicable**Transfer CSU, UC*

In this course, students compare original literary works and genres with their film adaptations. Students view films based on novels and short stories and assess how cinematic and literary techniques are employed to convey meaning.

**English 40A*****American Literature****3 units; 3 hours lecture**Recommended Preparation: eligibility for English 1A**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 discovery and exploration, 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 1A**Credit, degree applicable**Transfer CSU, UC*

This course surveys American literature from the post-Civil War period to the present, including the Literature of an Expanding Nation, the literature of Modernism, the literature of post World War II America, and contemporary American literature. The course recognizes the contribution of women and minority writers to the national literature.

**English 41A*****Survey of Film: 1895 – 1950****3 units; 3 hours lecture**Recommended Preparation: eligibility for English 1A**Credit, degree applicable**Transfer CSU, UC*

This course focuses on screening, discussing, 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.

**English 41B*****Survey of Film: 1950 to Present****3 units; 3 hours lecture**Recommended Preparation: eligibility for English 1A**Credit, degree applicable**Transfer CSU, UC*

This course focuses on screening, analyzing and writing about film as a narrative reflective of its time and culture. Students study representative film masterpieces from 1950 to the present by viewing films or portions of films. An emphasis is placed on ideas and values portrayed in the films with regards to how they reflect the concerns of particular nationalities and time periods. Students also analyze the growth and transformation of various artistic techniques used by the filmmakers, as well as trends in major transnational filmmaking and media conglomeration.

**English 42*****Chicano and Latino Literature****3 units; 3 hours lecture**Recommended Preparation: eligibility for English 1A**Credit, degree applicable**Transfer CSU, UC*

This course will focus on the analysis and interpretation of Chicano and Latino essays, novels, short stories, dramas, and poems written in English translation. Students will explore a wide survey of classic and contemporary Chicano and Latino texts that reflect social and cultural influences, as well as examine the process of assimilation and self-identity of the Chicano and Latino as thematically represented in literature.

**English 43*****African American Literature****3 units; 3 hours lecture**Recommended Preparation: eligibility for English 1A**Credit, degree applicable**Transfer CSU, UC*

This course provides a chronological and thematic survey of African American literature. Students will read and discuss representative works by African American writers. Emphasis will be on classic and contemporary literature.

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

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### English 44

#### ***The Literature of American Ethnic Groups***

3 units; 3 hours lecture

*Recommended Preparation:* eligibility for English 1A

*Credit, degree applicable*

*Transfer CSU, UC*

This course provides a chronological and thematic survey of American ethnic literature. Students will examine and discuss representative works by members of the following groups: African Americans, Asian Pacific Americans, Chicano/Latino Americans, European and Near Eastern Americans, Jewish Americans, and Native Americans. Emphasis will be contemporary literature.

### English 46

#### ***Literature and Sexual Identity***

3 units; 3 hours lecture

*Recommended Preparation:* eligibility for English 1A

*Credit, degree applicable*

*Transfer CSU, UC*

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.

### English 47

#### ***California Literature***

3 units; 3 hours lecture

*Recommended Preparation:* eligibility for English 1A

*Credit, degree applicable*

*Transfer CSU, UC*

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.

### English 48

#### ***Modern Literature of Latin America***

3 units; 3 hours lecture

*Recommended Preparation:* eligibility for English 1A

*Credit, degree applicable*

*Transfer CSU, UC*

This course is a survey of modern literature from Latin American countries. Students explore themes common to selected major writers and identify cultural, political, and stylistic patterns in their works.

### English 50

#### ***Special Topics in English***

*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 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.

### English 98abcd

#### ***College Literary Magazine Editing and Publishing***

3 units; 2 hours lecture, 3 hours lab

*Recommended Preparation:* eligibility for English 1A

*Credit, degree applicable*

*Transfer CSU*

This course provides students with experience in literary journal publishing. Students will evaluate literary magazines, create submission guidelines, advertise for and collect submissions, learn about the literary journal printing process, proofread and edit submissions, and design and compose layout. In addition, students will organize a public literary reading.

### English 99abc

#### ***Independent Study in English***

1-3 units; hours to be arranged

*Enrollment Limitation:* two English courses, one of which is English 1A, with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work

*Credit, degree applicable*

*Transfer CSU, UC - limitations apply*

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:* For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)

### 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

English Course Sequence Leading to:

### ENGLISH 1A Reading and Composition



**ESL 52C**

Advanced Reading  
(Optional)



**ESL 52B**

Intermediate Reading and  
Vocabulary Building



**ESL 52A**

Introduction to Reading  
and Vocabulary Building



**English A-X**

Writing the College Essay



**ESL 53B**

Intermediate Writing  
and Grammar



**ESL 53A**

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 1 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: qualification by assessment or completion of English as a Second Language 02A; 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.

### 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 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.

### **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.

### **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 Writing and Grammar***

4 units; 5 hours lecture

*Recommended Preparation: qualification by assessment*

*Credit, not degree applicable*

This entry-level academic composition course offers students an intensive writing experience. Students will write well-organized and coherent paragraphs transitioning to multi-paragraph essays. Students will identify and address grammar problems in their writing.

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

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### 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 course will enable 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, and magazine and newspaper articles, as well as by conducting informal surveys and observation tasks.

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



## ENVIRONMENTAL HORTICULTURE

### A.S. Degree and Certificate of Achievement

*Natural Sciences Division*

*www.elcamino.edu/academics/naturalsciences*

A student completing the degree or certificate requirements will be able to manage various landscape environments such as vegetable and flower gardens, turfgrass, houseplants, soils, cut flowers, and terrariums. A student will be able to apply fertilizers and pesticides (natural, chemical, biological, and cultural). The student will be able to propagate plants via grafting, budding, tissue culture, cuttings, specialized stems, and sexual means as well as demonstrate knowledge of various propagation structures. The student will be able to identify landscape plants (herbaceous, shrubs, trees) and identify their morphology. Outcomes of the program will be measured by the student's ability to design a landscape, make landscape management recommendations, and obtain employment in the industry.

#### 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

#### 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 biomes, plant groups, soil preparation and plant selection, turf grass selection, installation and care, landscape design, nursery management, plant propagation, integrated pest management, and basic botany and physiology. Career opportunities in horticulture will also be discussed.

#### 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.

#### **Horticulture 44**

##### ***Ecology of Edible, Medicinal and Poisonous Plants***

3 units; 2 hours lecture, 3 hours lab per week 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**

##### ***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 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 Horticulture Science 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.*

#### **Horticulture 99abc**

##### ***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: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)*

## 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: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)*

## Escrow

### See Real Estate

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

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## ETHNIC STUDIES

### A.A. Degree

*Behavioral and Social Sciences Division*

[www.elcamino.edu/academics/behavioralsocial](http://www.elcamino.edu/academics/behavioralsocial)

The degree in ethnic studies provides students with an interdisciplinary foundation for the study of American ethnic groups. The degree can be earned in a single ethnic subject category or in the combined American cultures option. The curriculum incorporates a range of cultural, historical, political, and sociological methodologies that provide students with a theoretical framework for analysis of the contributions, role and major issues of African Americans, Asian Americans, Chicanos, and Native Americans. Students will apply these theoretical perspectives to analyze socioeconomic and political factors that confront ethnic minorities as they interact with the majority society. Competencies will be assessed through examinations, essays, research papers, and directed projects.

#### 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 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.

#### Ethnic Studies 3

##### *The Chicano in Contemporary United States Society*

3 units; 3 hours lecture

*Recommended Preparation: eligibility for English 1A*

Credit, degree applicable

Transfer CSU

This course introduces the student to the complexity and diversity of contemporary Chicano society in the United States. The impact of American values on the socialization of Mexican Americans will be assessed with particular emphasis on political, economic, social, cultural and educational institutions.

# FASHION

## A.S. Degree and Certificates of Achievement

Industry and Technology Division  
www.elcamino.edu/academics/indtech

The fashion program prepares students for employment in the field of design and production or merchandising and provides upgrade opportunities for currently employed personnel. Upon completing the degree or certificate requirements, students gain proficiency in clothing, construction, fashion illustration, 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.

#### Computer Pattern Making Technician:

Fashion 11ab, 14, 15ab, 26A, 29ab

Total Units: 12

#### 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, 37; 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

Fashion Stylist: Fashion 10ab\*, 23, 31, 35, 41, 42abc\*, 95abcd (2 units) (\*one semester)

Total Units: 18

### Fashion 1

#### *Career Opportunities in Fashion*

1 unit; 1 hour lecture

Credit, degree applicable

Transfer CSU

This course surveys career opportunities in the fashion industry including fashion design and fashion merchandising. Students will explore career choice possibilities in terms of their personality traits and will study the characteristics, technology and global inter-relationships of segments of the fashion industry through readings, classroom exercises and industry contacts. Students will prepare for job search including preparation of a resume, cover letter and business cards.

### Fashion 2

#### *Presentation Techniques for Fashion*

1 unit; 0.5 hour lecture, 1.5 hours lab

Prerequisite: one semester of Art 10ab with a minimum grade of C or equivalent

Recommended Preparation: Fashion 15ab and 16ab

Credit, degree applicable

Transfer CSU

This course will assist the student in developing techniques for fashion presentation. Basic concepts and techniques of applied design, including media presentation methods and visual communication are studied.

### Fashion 4ab

#### *Computer Fashion Illustration*

3 units; 2 hours lecture, 4 hours lab

Recommended Preparation: Fashion 15ab or equivalent

Credit, degree applicable

Transfer CSU

This course introduces the use of illustration (vector) and photo-editing (raster) software (for example: Adobe Illustrator and Adobe Photoshop) to sketch, illustrate and design apparel and marketing material for fashion. Students will design and develop logos, hang tags, dressed croquis, apparel sketches, and mood boards for fashion advertising.

### Fashion 10ab

#### *Clothing Construction I*

3 units; 2 hours lecture, 3 hours lab

Credit, degree applicable

Transfer CSU

This course provides the analysis and application of basic clothing construction techniques used on woven and knit garments emphasizing pattern and fabric selection, seam and garment construction and finishing. Students will be trained on the proper use and care of the sewing and overlock machine. Consumer decision-making is emphasized.

### 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

In this course students are introduced to the basic concepts, techniques, and planning procedures for the visual approach to selling merchandise. Current methods of visual merchandising are discussed including the use of mannequins, signage, and marketing as well as store planning and layout.

### **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 31**

#### ***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, 3 hours lab per week to be arranged

*Prerequisite:* one of the following courses: Fashion 1 or Fashion 15ab or Fashion 20 or Fashion 28 or Fashion 31 or Fashion 41 or Fashion 10ab or Fashion 27 or Fashion 35 or Fashion 4ab or equivalent experience

Credit, degree applicable

Transfer CSU

This course is a study of the planning, directing and coordinating of fashion promotions including the El Camino annual fashion show. Promotions, financing, and vendor selection will be considered in relation to event planning and implementation.

### **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: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)*

**FILM/VIDEO****A.A. Degree and Certificate of Achievement**

*Fine Arts Division*

[www.elcamino.edu/academics/finearts](http://www.elcamino.edu/academics/finearts)

By completing the degree or certificate requirements, students gain both theoretical and practical knowledge in film/video production, scriptwriting, and media aesthetics. The curriculum prepares students for either entry-level employment in the entertainment and telecommunications industries or for transfer to a four-year degree program. Upon completion of the required courses, students will be able to write, shoot, and edit short films or videos and demonstrate basic skills necessary for operating various film, video, and digital production equipment. Degree and certificate competencies will be assessed regularly by evaluating student performance in producing individual and group projects.

**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 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 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.

**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 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 20 or 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.



## FIRE AND EMERGENCY TECHNOLOGY

### A.S. Degree and Certificates of Achievement

Industry and Technology Division  
[www.elcamino.edu/academics/indtech](http://www.elcamino.edu/academics/indtech)

The fire and emergency technology program prepares students for entry-level employment and job upgrades in fire services and emergency medical fields. By completing the degree or certificate requirements, students will gain the ability to apply the principles of fire combat, fire protection organization, fire prevention, fire behavior, and building construction. Students will also gain proficiency in emergency medical assistance and in the handling of hazardous materials and emergency vehicles and apparatus. Competencies will be assessed regularly in compliance with the California State Firefighter I Standards and with the Los Angeles County certification process for emergency medical technicians and paramedics.

Note: Since employment as a fire fighter requires passing stringent physical and agility exams, persons considering such a career should ascertain that they meet those requirements.

#### El Camino College Major Requirements

Fire and Emergency Technology Option: Fire and Emergency Technology 1, 2, 5, 6, 9, 10, 20, 140, 141

Recommended Electives: Fire and Emergency Technology 4, 7, 8, 11, 14, Physical Education 280

Total Units: 26

Paramedical Technician Option: In order to be eligible for the Paramedical Technician Option, the student must first complete the following requirements:

1. Provide verification of Emergency Medical Technician-1 (EMT-1) certification within the last 12 months;
2. Provide verification of at least 6 months experience as an EMT-1 in a pre-hospital setting;
3. Complete Fire Technology 15 or equivalent; and
4. Pass a medical examination according to the National Fire Protection Association (NFPA) Standard #1582;
5. Furnish proof of rubella immunity; Tuberculosis (TB) test; Hepatitis B vaccine. In addition to the program prerequisites, it is recommended that students be eligible, through assessment or coursework, for English 1A and Mathematics 80.

Required Courses (after meeting above requirement): Fire and Emergency Technology 130, 131, 132, 133, 134, 135, 136, 137, 138, 139

Recommended Electives: Anatomy 30 and any college chemistry course with a laboratory

Total Units: 33

#### Certificates of Achievement

A Certificate of Achievement will be granted upon completion of the courses in the Fire and Emergency Technology option, Fire Academy option, or Paramedical Technician option. At least 50% of the courses required for the Certificate of Achievement must be completed at El Camino College.

Fire and Emergency Technology: Fire and Emergency Technology 1, 2, 5, 6, 9, 10, 20, 140, 141

Total Units: 26

Fire Academy: Fire and Emergency Technology 1, 140, 141; Fire and Emergency Technology 15 or 115A and 115B; three units from: Fire and Emergency Technology 2, 5, 6, 7, 8, 9, 10, 11, 14, 19, 20

Other certificate requirements: completion of CPAT or FPAT (Physical Agility Test).

Total Units: 23



#### 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: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)

## FIRE AND EMERGENCY TECHNOLOGY

(continued)

**Paramedical Technician:** In order to be eligible for the Paramedical Technician Option, the student must first complete the following requirements:

1. Provide verification of Emergency Medical Technician-1 (EMT-1) certification within the last 12 months;
2. Provide verification of at least 6 months experience as an EMT-1 in a pre-hospital setting;
3. Complete Fire Technology 15 or equivalent; and
4. Pass a medical examination according to the National Fire Prevention Association (NFPA) Standard #1582;
5. Furnish proof of rubella immunity; Tuberculosis (TB) test; Hepatitis B vaccine. In addition to the program prerequisites, it is recommended that students be eligible, through assessment or coursework, for English 1A and Mathematics 80.

**Required Courses** (after meeting above requirements): Fire and Emergency Technology 130, 131, 132, 133, 134, 135, 136, 137, 138, 139

**Recommended Electives:** Anatomy 30 and any college chemistry course with a laboratory

**Total Units:** 33

### Preparation for the Transfer Major

For information of 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.

### Fire and Emergency Technology 1

#### **Fire Protection Organization**

*3 units; 3 hours lecture*

*Recommended Preparation: 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 2

#### **Fire Prevention Technology**

*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 fundamental information regarding the history and philosophy of fire prevention; organization and operation of a fire prevention bureau; use of fire codes; identification and correction of fire hazards; and the relationship of fire prevention with fire safety education and detection and suppression systems.

### 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.

**Fire and Emergency Technology 14*****Applied Science for Fire Protection***

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 is an introduction to matter, forces and motions, and the mechanics of liquids and gases, as they relate to fire technology.

**Fire and Emergency Technology 15*****Fire Academy***

12 units; 20 hours lecture, 20 hours lab (10 week course)

10 hours lecture, 10 hours lab (20 week course)

Prerequisite:

1. Fire and Emergency Technology 1 with a minimum grade of C or equivalent;
2. Fire and Emergency Technology 140 and 141 (Emergency Medical Training) with a minimum grade of B in each or equivalent or possession of valid certification as an Emergency Medical Technician;
3. Fire Fighter Physical Agility Test (FPAT or CPAT)
4. Pass a physical examination according to the National Fire Protection Association (NFPA) Standard #1582;
5. Possess a valid California Driver's License

Credit, degree applicable

This class is designed 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. The student will participate in a 400-hour course of instruction emphasizing basic fire fighting skills such as methods of fire extinguishment, principles of ventilation, techniques of physical rescue, fire behavior, building construction, fire apparatus and fire equipment maintenance.

*Note:* Students must apply through the Industry and Technology Division Office. Once acceptance into the academy has been verified, college registration will take place at the first class meeting.

**Fire and Emergency Technology 19*****Fire Service Entrance Preparation***

3 units; 3 hours lecture

*Recommended Preparation:* Fire and Emergency Technology 1; English A and Mathematics 40 or 33

Credit, degree applicable

This course will explore all aspects of commonly used hiring procedures in the field of fire service. Fire service diagnostic tests will be used to identify any weakness in fire service entry-level skills. Students will research hiring practices, take practice written examinations, participate in mock oral board examinations, and receive instruction which will enhance their fire technology career opportunities.

**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

Transfer CSU

This course addresses the features of design and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems, water supply for fire protection and portable fire extinguishers.

**Fire and Emergency Technology 50*****Special Topics in Fire and Emergency 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 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.

### **Fire and Emergency Technology 60B**

#### ***Hazardous Materials, Applied Chemistry***

1 units; 40 hours lecture (one week course)

*Recommended Preparation:* Fire and Emergency Technology 60A

*Credit, degree applicable*

This course emphasizes the identification of hazardous materials for first responders and prevention officers. The course includes basic chemistry terminology, transportation regulations, toxicology of hazardous materials, detection and monitoring equipment and risk assessment. Students successfully completing this course receive Hazardous Materials Technician 1B certification.

### **Fire and Emergency Technology 60C**

#### ***Hazardous Materials, Incident Organization***

1 units; 40 hours lecture (one week course)

*Recommended Preparation:* Fire and Emergency Technology 60B

*Credit, degree applicable*

This course emphasizes command concepts associated with hazardous materials response activities for first responders and prevention officers. Topics include methods of accessing information about hazardous materials, meteorological considerations influencing response activities, protective action consideration, respiratory equipment, chemical protective equipment, site safety and contingency planning concepts. Students successfully completing this course receive Hazardous Materials Technician 1C certification.

### **Fire and Emergency Technology 60D**

#### ***Hazardous Materials, Tactical Field Operations***

1 units; 40 hours lecture (one week course)

*Recommended Preparation:* Fire and Emergency Technology 60C

*Credit, degree applicable*

This course emphasizes the techniques used by first responders and prevention officers to control leaks and spills from hazardous materials containers. Topics include care and proper use of chemical protective clothing, defensive, offensive and nonintervention control methods, decontamination procedures, preservation of evidence, reports and supporting documentation required at hazardous materials incidents. Student successfully completing the course receive Hazardous Materials Technician 1D certification.

### **Fire and Emergency Technology 60F**

#### ***Special HAZMAT Mitigation Techniques***

1 unit; 10 hours lecture, 30 hours lab  
(one 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 Marshall Hazardous Materials Technician 1F certification.

### **Fire and Emergency Technology 60G**

#### ***HAZMAT Field Operations***

1 unit; 10 hours lecture, 30 hours lab  
(one 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 Marshall Hazardous Materials Technician 1G certification.

### **Fire and Emergency 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 Fire and Emergency Technology field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

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

### **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: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)*

### **Fire and Emergency Technology 128**

#### ***Paramedic Preparation Course***

3 units; 16 hours lecture (4 week course)

*Recommended Preparation:* six months experience as an Emergency Medical Technician (EMT) or equivalent

*Credit, degree applicable*

*Transfer CSU*

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 (13 week course)

Enrollment Limitation: admission to Paramedical Technician Program  
Credit, degree applicable

This course provides an introduction to medical terminology, along with a review of surface anatomy and physiology. The course presents an overview of the human nervous system, cardiovascular system, and respiratory system. Aseptic techniques will be described and demonstrated.

**Fire and Emergency Technology 131****Field Assessing and Reporting**

1.5 units; 2 hours lecture, 1 hour lab

(13 week course)

Enrollment Limitation: admission to Paramedical 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 week course)

Enrollment Limitation: admission to Paramedical Technician Program  
Credit, degree applicable

This course provides an introduction to the study of drugs and their ongoing nature and effect on living tissue. A study of the various drugs that are available to the prehospital care technician is presented along with medication administration techniques. An introduction to intravenous (IV) therapy and drug therapy is covered.

**Fire and Emergency Technology 133****Basic and Advanced Life Support**

6.5 units; 9 hours lecture (13 week course)

Enrollment Limitation: admission to Paramedical Technician Program  
Credit, degree applicable

This course provides students with a review of cardiopulmonary resuscitation (CPR) techniques and sophisticated forms of airway management. The course presents an introduction and interpretation of electrocardiogram (EKG) rhythms with the use of an oscilloscope. Drugs used in cardiac arrest situations are discussed. Simulation exercises are conducted throughout the course.

**Fire and Emergency Technology 134****Medical Emergencies**

4 units; 6 hours lecture, 1 hour lab

(13 week course)

Enrollment Limitation: admission to Paramedical Technician Program  
Credit, degree applicable

This course covers a variety of medical emergencies that a paramedic is most likely to encounter. Topics presented include, but are not limited to communicable diseases, chest pain, drug abuse/poisonings, diabetes, neurological complications, and respiratory distress.

**Fire and Emergency Technology 135****Traumatic Emergencies**

2 units; 3 hours lecture (13 week course)

Enrollment Limitation: admission to Paramedical Technician Program  
Credit, degree applicable

This course covers the causes and treatment of bodily injuries due to trauma. Topics include maxillofacial and soft tissue injuries, burns, head, spinal, chest and abdominal wounds, emergency childbirth and multi-casualty incidents.

**Fire and Emergency Technology 136****Special Patient Emergencies**

2 units; 3 hours lecture (13 week course)

Enrollment Limitation: admission to Paramedical 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 week course)

Enrollment Limitation: admission to Paramedical Technician Program  
Credit, degree applicable

This course covers the laws and legal authority which govern the scope of practice for the paramedic. Also discussed are documentation techniques, paramedic report writing and skills competency testing.

**Fire and Emergency Technology 138****Paramedic Clinical Internship**

3 units; 40 hours lab per week

(4 week 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 Paramedical Technician Program  
Credit, degree applicable

This course provides the student with an opportunity to apply knowledge and skills learned in the preceding courses to patient care. The emphasis of the course is to increase the student's assessment and diagnostic skills in a clinical setting.

Note: Pass/no pass only.

**Fire and Emergency Technology 139****Paramedic Field Internship**

8.5 units; 60 hours lab per week

(8 week course)

Prerequisite: Fire and Emergency Technology 138 with a minimum grade of C

Enrollment Limitation: admission to Paramedical Technician Program  
Credit, degree applicable

This course provides an in-depth opportunity for the student to apply the skills and techniques that are necessary for a paramedic. The student will complete a field internship in a designated mobile intensive care unit under the supervision and evaluation of a certified paramedic or mobile intensive care nurse.

Note: Pass/no pass only.

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

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### 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.*

### Fire and Emergency Technology 141

#### **Emergency Medical Technician Laboratory**

1 unit; 3 hours lab

Corequisite: enrollment in Fire and Emergency Technology 140

Credit, degree applicable

Transfer CSU

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.*

*Note: This course is repeatable.*

### 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.

### Fire and Emergency Technology 150

#### **Firefighter In-Service Training**

2 units; 1 hour lecture per week to be arranged, 4 hours lab per week to be arranged

Enrollment Limitation: current employment as a paid, volunteer or auxiliary firefighter

Credit, degree applicable

Transfer CSU

This course will acquaint fire service personnel with current changes in contemporary fire fighting techniques. Major topics include fire service appliances, fire chemistry, automatic fire extinguishers and agents. Additional topics include fire prevention and enforcement, arson investigation, public safety, hazardous materials control and enforcement, communication, and emergency medical techniques.

*Note: This course is repeatable.*

### Fire and Emergency Technology 152

#### **Flashover Survival Training**

1 unit; 18 hours lecture (one week course)

Enrollment Limitation: current employment as a paid, volunteer or auxiliary firefighter

Credit, not degree applicable

This course is designed to provide students with the skills necessary to survive fire flashover and low pressure smoke explosion, also known as a backdraft. Students learn to recognize the incipient stages of fire development, survival techniques, and combat techniques that delay flashover. Each student will participate in live exercises simulating flashover in a Swede Survival Flashover Container.

*Note: Pass/no pass only.*

*Note: This course is repeatable.*

## First Aid

### First Aid 1

#### **First Aid, Cardiopulmonary Resuscitation (CPR) and Basic Emergency Care**

3 units; 3 hours lecture

Recommended Preparation: eligibility for English A or 84

Credit, degree applicable

Transfer CSU, UC

This course follows the American Red Cross Certification Program for First Aid, Basic Life Support (infant, child, adult and two person CPR), and Automated External Defibrillation (AED). The course content includes an emphasis on prevention of injuries, safety education, and skills necessary to sustain life in the event of trauma or sudden illness. Demonstration of skill proficiency and passing written exams with 80% or better will qualify students for certification in American Red Cross First Aid, Community CPR, and Professional Rescuer CPR.



# FRENCH

## A.A. Degree

Humanities Division

[www.elcamino.edu/academics/humanities](http://www.elcamino.edu/academics/humanities)

By completing the degree requirements, the student will acquire proficiency in speaking, reading, writing, and understanding French and will gain knowledge of French and Francophone cultures. The student will be able to communicate in French, write formal compositions, and read the texts of French and Francophone authors, all at the intermediate-mid level of competency. Competencies will be assessed throughout the language sequence with written and oral exams. This major provides career opportunities where knowledge of French is useful and prepares students for continued advanced learning of French.

The student who has completed two or more years of French in high school will have the opportunity to enroll with advanced standing and to complete semesters 5 and/or 6 at El Camino College. It is recommended that language majors enroll in conversation classes.

### 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 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.

## 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: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)



## GENERAL SCIENCE

### A.S. Degree

Natural Sciences Division

[www.elcamino.edu/academics/naturalsciences](http://www.elcamino.edu/academics/naturalsciences)

The general science program provides students the opportunity to investigate diverse methods of inquiry by experiencing courses from a cross section of science disciplines. Students will develop critical thinking skills, learn to communicate effectively in writing, and acquire an understanding of major scientific concepts. Through course options, students will use mathematical concepts to solve problems and employ methods of scientific inquiry to understand the world around them. Completion of the degree requirements will prepare students with the skills and resources needed to facilitate academic and career decisions. Competencies will be assessed through regularly scheduled theory and laboratory examinations.

#### 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

## GENERAL STUDIES

### A.A. Degree

Behavioral and Social Sciences Division

[www.elcamino.edu/academics/behavioralsocial](http://www.elcamino.edu/academics/behavioralsocial)

The Associate Degree in General Studies provides students with the opportunity to explore diverse methods of inquiry by selecting courses from a cross section of disciplines in an "area of emphasis." Students will develop critical thinking skills, learn to communicate effectively in writing, acquire an understanding of major concepts to solve problems, and employ methods of scientific inquiry to understand the world around them. Completion of the degree requirements will provide students with the skills and resources needed to make informed academic and career-related decisions.

Completion of the General Studies degree does not guarantee acceptance into a four-year university. Students planning to transfer to a CSU or UC should follow the CSU GE Breadth or IGETC pattern and complete transferable coursework that relates to the major at the CSU or UC campus. For further information and course selection, please consult with an academic counselor.

#### El Camino College Major Requirements

**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.

## GENERAL STUDIES (continued)

### 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;  
English 1B, 1C, 10, 12, 15A, 15B, 18, 20, 21, 22, 23, 24A, 25A, 26, 27, 28, 29, 30, 31, 32abc, 33, 34, 35, 36, 38, 39, 40A, 40B, 41A, 41B, 42, 43, 44, 46, 47;  
Film/Video 52, 53, 54abc;  
History 101, 102, 105, 106, 108, 110, 111, 112, 122, 128, 129, 140, 141, 143, 145, 154, 162, 163, 165, 175, 176, 177, 183, 184;  
History of Science 11;  
Humanities 1;  
Journalism 1, 12;

#### 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, 81ab, 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, 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;  
English 1B, 1C, 10, 12, 15A, 15B, 18, 20, 21, 22, 23, 24A, 24B, 25A, 26, 27, 28, 29, 30, 31, 32abc, 33, 34, 35, 36, 38, 39, 40A, 40B, 41A, 41B, 42, 43, 44, 46, 47;  
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

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.

## GENERAL STUDIES (continued)

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 101, 102, 105, 106, 108, 110, 111, 112, 122, 128, 129, 140, 141, 143, 145, 154, 162, 163, 165, 175, 176, 183, 184;  
 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

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

## GEOGRAPHY

### A.S. Degree

*Natural Sciences Division*

[www.elcamino.edu/academics/naturalsciences](http://www.elcamino.edu/academics/naturalsciences)

The program is designed to provide students the opportunity to obtain a degree upon successful completion of the requirements of a geography transfer major. The geography student will apply fundamental concepts and principles of natural and cultural systems as studied in a spatial context. Competencies will be assessed by examining the student's ability to explain the relationships between people, places, and environments. Students will also map spatial distributions of natural and cultural features.

#### 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.

## GEOLOGY

### A.S. Degree

*Natural Sciences Division*

[www.elcamino.edu/academics/naturalsciences](http://www.elcamino.edu/academics/naturalsciences)

The program is designed to provide students the opportunity to obtain a degree upon successful completion of the requirements of a 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.

# 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.

## 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.*

## Geography 50

### *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.

## Geography 99abc

### *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 - limitations apply*

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: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)*

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

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# Geology

## Geology 1

### **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.*

## Geology 2

### **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 Geology 4 or 30 or 32.*

## 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 geologic exercises and the use of topographic maps. Laboratory exercises will include identification of rocks and minerals, map exercises, structure problems, field studies and recognition of land forms created by various processes working on and in the earth.

## 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.*

## 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.

**Geology 99abc****Independent Study**

1-3 units; hours to be arranged

*Enrollment Limitation:* two earth sciences courses with a minimum grade of B in each and acknowledgment by the instructor with whom student will work

Credit, degree applicable

Transfer CSU, UC - limitations apply

This course provides the student an opportunity to explore research problems in Earth Sciences not covered in the regular departmental offerings through library, laboratory, or field projects. Regular conferences with the instructor are coordinated with assigned laboratory work and research projects (60 hours per unit).

Note: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)

**German****German 1****Elementary German 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 German. 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: The course is comparable to two 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.

**German 3****Intermediate German I**

4 units; 5 hours lecture

*Prerequisite:* German 2 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC

This intermediate course, taught within the context of German culture, emphasizes the study of the essentials of German grammar and the fundamentals of formal German composition. Through oral and written practice, students expand their German vocabulary and use of idiomatic expressions. Students read materials of representative German authors.

Note: The prerequisite for this course is comparable to three years of high school German.

**German 21ab****Beginning Conversational German**

2 units; 2 hours lecture

*Prerequisite:* German 1 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

This course is designed to help students develop competency in German oral expression, oral comprehension, pronunciation, and conversational strategies.

## German 22ab

### *Intermediate Conversational German*

2 units; 2 hours lecture

*Prerequisite: German 2, 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 German 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 German language.

## German 99abc

### *Independent Study*

1-3 units; hours to be arranged

*Enrollment Limitation: two courses in German 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 German education not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with the assigned German education projects (60 hours per unit).

*Note: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)*

## 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 email contact.*

## Health Education

### See Contemporary Health

## HISTORY

### A.A. Degree

*Behavioral and Social Sciences Division*

*[www.elcamino.edu/academics/behavioralsocial](http://www.elcamino.edu/academics/behavioralsocial)*

The degree provides students with a foundation in the science of historical inquiry. After completing the program requirements, students will gain an understanding of the methodologies and schools of interpretation utilized by historians to study the past. Students will also demonstrate knowledge of the primary cultural, economic, intellectual, political, social, and diplomatic institutions of the United States and the world. Competencies will be assessed through the evaluation of student term papers and projects, essays, and regularly scheduled examinations.

### El Camino College Major Requirements

History 101, 102, 140, 141;

three courses from: American Studies 7, History 105, 106, 108, 110, 111, 112, 114, 122, 128, 129, 143, 145, 152, 154, 162, 163, 165, 175, 176, 177, 178, 183, 184, 190

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.

### 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: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)*



**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 105 and 106 and History 101 and 102 and/or History 110 and 111 is one series.*

**History 108**

(formerly History 9)

**United States History: The American Indian Experience**

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 with an emphasis on native peoples of North America. Topics include the impact of European contact, trade, and colonization as well as the impact of United States political, economic, and social policies on Native Americans. Emphasis is placed on the attempts of American Indians to protect their sovereignty and revitalize their societies.

*Note: This course meets the criteria of the CSU graduation requirement for United States History, Constitution, and American Ideals.*

**History 110**

(formerly History 16A)

**The African American in the United States to 1877**

3 units; 3 hours lecture

*Recommended Preparation: eligibility for English 1A**Credit, degree applicable**Transfer CSU, UC\**

This course is a survey of the United States to 1877 with particular emphasis on the role of African Americans in shaping American society. The contributions of African Americans to the economic, political, social, and cultural development of the nation will be examined.

*Note: This course meets the criteria of the CSU graduation requirement for United States History, Constitution, and American Ideals.*

*\*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.*

*\*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 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.

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

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### 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, UC*

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 origins of these complex cultures in the Neolithic era to the emergence of the West in the fifteenth century. Topics include the early civilizations of the Near East, Egypt, India, China, the Americas, Greece, and Rome.

### 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.

*Note: History 140 is not a prerequisite.*

### 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 through 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 on 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 the earliest times to the present day. Emphasis is placed on the origins and evolution of major cultural, social, economic, and political traditions and institutions. The influences of China and the West on the formation of Japanese values will also be examined.

**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 prehistory to the eve of colonial rule. Emphasis is given to the political, economic, and social development of the African continent. Topics include African trade relations with Europe and the world, the influences of Christianity and Islam in Africa, the Transatlantic slave trade, the 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 surveys the political, economic, social and cultural development of Africa from 1885 to the present. Topics include colonial conquest and African resistance to European rule, influence of the Christian missionaries and Islam in Africa, the striving for independence and the process of decolonization, and the challenges of modern state building.

### History 190

#### ***History of the Middle East***

3 units; 3 hours lab

*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 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.*

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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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## Home Health Aide

See Nursing

## Horticulture

See Environmental Horticulture

## 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 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 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****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**www.elcamino.edu/academics/indtech*

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.

**Industry and Technology 15*****Exploring Careers in Industry and Technology***

3 units; 3 hours lecture

*Credit, degree applicable*

This course introduces the technology, skills, equipment and materials utilized in the following disciplines: Administration of Justice, Air Conditioning and Refrigeration, Architecture, Automotive Collision Repair/Painting, Automotive Technology, Computer Aided Design/Drafting, Construction Technology, Cosmetology, Culinary Arts, Electronics, Environmental Technology, Fashion Design, Fire and Emergency Technology, Machine Tool Technology and Welding. Career options of each discipline studied will be presented.

*Note: Pass/no pass only.*

## 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.*

### 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

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.

## JAPANESE

### A.A. Degree

Humanities Division

[www.elcamino.edu/academics/humanities](http://www.elcamino.edu/academics/humanities)

By completing the degree requirements, the student will acquire proficiency in speaking, reading, writing, and understanding Japanese and will gain knowledge of Japanese culture. The student will be able to communicate in Japanese, write formal compositions, and read the texts of Japanese authors, all at the intermediate-mid level of competency. Competencies will be assessed throughout the language sequence with written and oral exams. This major provides career opportunities where knowledge of Japanese is useful and prepares students for continued learning of Japanese.

The student who has completed two or more years of Japanese in high school will have the opportunity to enroll with advanced standing.

#### **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 1

#### **Elementary Japanese I**

4 units; 5 hours lecture

*Recommended Preparation:* eligibility for English A

Credit, degree applicable

Transfer CSU, UC

This course, taught within the context of Japanese culture, introduces students to the development of skills for language acquisition in speaking, listening, reading, and writing of modern Japanese. Students also are introduced to the cultural background of the language. Technological support includes computer programs, DVDs, CDs, Internet access to online materials and tutorial services.

*Note: This course is comparable to two years of high school Japanese.*

### 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 through intensive training on listening, speaking, reading, and writing. Students improve their speaking skills and extend their study of the basic grammar and Kanji characters. Technological support includes computer programs, DVDs, CDs, Internet access to online materials and tutorial services.

*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

In this first intermediate course, taught within the context of Japanese culture, students develop their functional communication skills in Japanese through listening, speaking, reading, and writing practice. Students expand their knowledge of the Japanese language and culture. Students read material drawn from daily Japanese life. Note: The prerequisite for this course is comparable to three years of high school Japanese.

**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

In this second intermediate course, taught within the context of Japanese culture, students further develop their functional communication skills in Japanese through listening, speaking, reading, and writing practice. Students expand their Japanese proficiency and cultural knowledge by comparing and contrasting the Japanese language and culture to their own. Students read material drawn from daily Japanese life.

Note: The prerequisite for this course is comparable to four years of high school Japanese.

**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

Students develop competency in Japanese oral expression, oral comprehension, and conversational strategies. Students learn how to converse in various situations, such as business, travel, and dining within the context of Japanese culture.

**Japanese 22ab****Intermediate Conversational Japanese**

2 units; 2 hours lecture

Prerequisite: Japanese 2 and one semester of 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 native Japanese speakers.

**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: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)



# JOURNALISM

## A.A. Degree and Certificate of Achievement

Humanities Division

[www.elcamino.edu/academics/humanities](http://www.elcamino.edu/academics/humanities)

By completing the degree or certificate requirements, the student will acquire proficiency in traditional and electronic news gathering techniques and in analyzing and evaluating information. The student will be able to write a variety of publishable stories for electronic and print journalism and to apply principles of editing and publication design. Degree and certificate competencies will be assessed regularly by performance in the college newspaper's print and Web editions and its magazine, as well as by participation in state and national competitions. The major prepares students for career opportunities in electronic journalism and in newspaper, magazine, advertising, public relations, and radio/television work.

### El Camino College Major Requirements

Journalism 1, 3ab (one semester), 6 or Photography 10, Journalism 9abcd (one semester), 11abcd (one semester), 12, 14abcd (one semester);

one course from: Journalism 2, 4, 5, 7ab or Photography 11ab (one semester), Economics 1, Political Science 5, 8

Total Units: 21-22

### Certificate of Achievement

A Certificate of Achievement will be granted upon completion of the courses listed below. At least 15 units must be completed at El Camino College.

Journalism 1, 3ab (one semester), Journalism 6 or Photography 10, Journalism 9abcd (one semester), 11abcd (two semesters), 12, 14abcd (one semester)

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.

### 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.

### Journalism 4

#### Feature Writing

2 units; 2 hours lecture

*Prerequisite: eligibility for English 1A or equivalent*

*Credit, degree applicable*

*Transfer CSU*

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 techniques 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 writing and reporting for radio and television news outlets. Principles and techniques of broadcast news, including interviewing, writing, and presenting news for radio and television stations, are covered. Emphasis is placed on 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.

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

**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 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 maximum 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.

**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: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)



## LABORATORY TECHNICIAN (MEDICAL)

### A.S. Degree

Natural Sciences Division

[www.elcamino.edu/academics/naturalsciences](http://www.elcamino.edu/academics/naturalsciences)

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

### 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.

#### 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 matter 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 semester 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

This course is an introduction to the practical writing skills and necessary analytical skills required in the law office. Topics include analysis of cases, analysis of statutes and administrative regulations, drafting and generating objective documents used in the legal environment, and generating and drafting persuasive documents submitted by attorneys to the trial and appellate courts.

**Law 18*****Wills, Trusts and Estate Planning***

3 units; 3 hours lecture

Prerequisite: Law 11 with a minimum grade of C or equivalent experience

Credit, degree applicable

Transfer CSU

This course examines basic concepts and the proper use of wills and trusts in estate planning. Topics include the taxes through estate planning, probate, methods of holding title to property, tax effects of gifts, gifts to minors, laws of intestacy, state and federal tax requirements during life and upon death, guardianship, and conservatorship.

**Law 19*****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 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 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

### LIBERAL STUDIES (ELEMENTARY TEACHING)

#### A.A. Degree

*Behavioral and Social Sciences Division*  
[www.elcamino.edu/academics/behavioralsocial](http://www.elcamino.edu/academics/behavioralsocial)

This degree is designed for students who wish to earn a multiple-subject teaching credential authorizing them to teach in grades K-5. Students will study a broad range of subjects to prepare them for teaching, including English, mathematics, science, social science, visual and performing arts, and human development. Competencies will be assessed regularly through projects, examinations, laboratory experiments, and presentations. Program assessment will be conducted by tracking student placement in teacher preparation programs at the university level.

#### General Information

Majoring in Liberal Studies will afford students the opportunity to complete the first two years of lower division coursework for their intended transfer institution and, depending upon the program selected, up to 45 hours of the required fieldwork for the credential.

#### 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 102; 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.

## Library Information Science

### 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.

### 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.

## MACHINE TOOL TECHNOLOGY

### A.S. Degree and Certificates of Achievement

*Industry and Technology Division*

[www.elcamino.edu/academics/indtech](http://www.elcamino.edu/academics/indtech)

The machine tool technology program prepares students for employment in machine shops, tool rooms, and instrument and experimental laboratories and provides upgrade opportunities for employed industrial personnel. Students gain proficiency in the set-up and operation of drilling machines, lathes, mills, grinders, electrical discharge machines, Computer Numerical Control (CNC) lathes, CNC milling machines, and computer aided manufacturing systems. Competencies will be assessed regularly in accordance with skill standards established by the National Institute of Metalworking Skills (NIMS). Students completing the program may enter industry as an advanced apprentice machinist or machine operator and anticipate advancement to machinist, tool and die maker, experimental machinist, or numerical control programmer.

#### 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

# MACHINE TOOL TECHNOLOGY

(continued)

## 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.

### CNC Machine Operator:

101abcd,\* 103abcd,\* 105abcd,\* 107abcd\* (\*one semester of)

Total Units: 16

### 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

## Machine Tool Technology 2

### Manufacturing Print Reading

3 units; 3 hours lecture

Credit, degree applicable

Transfer CSU

Students are introduced to engineering drawings and engineering specifications used in manufacturing industries. Representative drawings from simple production to complex assembly will be used to demonstrate concepts and for practice in interpreting the symbols and notations. Geometric Dimensioning and Tolerancing (GD&T) in accordance with American National Standards Institute (ANSI) Y-14.5 and the sketching of simple machine parts are also discussed.

## 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 10J

### Numerical Control Graphics Programming

3 units; 2 hours lecture, 3 hours lab

Recommended Preparation: Machine Tool Technology 10A, Machine Tool Technology 40, Machine Tool Technology 101abcd or equivalent

Credit, degree applicable

Transfer CSU

This course covers Computer Aided Manufacturing (CAM), emphasizing interactive graphics programming for Numerical Control (NC) machines. Concepts studied will include interactive geometry construction, tool motion, machine functions, repetitive programming, graphic output and graphic editing. Students will process programs using interactive graphics computer systems.

## Machine Tool Technology 10K

### 3D Numerical Control Graphics Programming

3 units; 2 hours lecture, 3 hours lab

Prerequisite: Machine Tool Technology 10J with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course covers Computer Aided Manufacturing (CAM), emphasizing interactive graphics programming for Numerical Control (NC) machines. Students will utilize various techniques of creating geometry on multiple work planes, three dimensional (3-D) surface toolpath creation and manipulation, implementing 4th and 5th axis machining, generating surface to surface intersections, creating blends between surfaces, creating roughing operations for 3D, and Computer Aided Design (CAD) data conversion for the purpose of 3D machining.

## 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 101abcd

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.

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

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### 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

Students are introduced to the basic principles and operation of machine tools with a focus on bench operations, drilling, engine lathes, mills, and grinding machines. Standard industry practices and tool set-ups used are emphasized. Laboratory projects and exercises related to the lectures and demonstrations will be assigned.

### 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 101abcd or Machine Tool Technology 46 or Machine Tool Technology 16ab with a minimum grade of C in each prerequisite course  
Credit, not degree applicable

Students will develop machining skills in preparation for the seven categories of National Institute for Metalworking Skills (NIMS) Level I credential examinations. Skill development activities will focus on safe machining practices; engineering drawings; machine tool calculations; workpiece inspection; set up and operation of conventional machine tools.

*Note:* Pass/no pass only.

### Machine Tool Technology 48abcd

#### **Machining for Robotics Preparation**

0.5 - 2 units; 1.5 – 6 hours lab per week to be arranged

Credit, not degree applicable

Students develop their machining skills by preparing parts and components for the FIRST (For Inspiration and Recognition of Science and Technology) Robotics competition. Skill development activities focus on safe machining practices; engineering drawings; machine tool calculations; workpiece inspection; and set up and operation of conventional and Computer Numerically Controlled (CNC) 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:* For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)

### 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.

## MANUFACTURING TECHNOLOGY

### A.S. Degree and Certificate of Achievement

Industry and Technology Division  
[www.elcamino.edu/academics/indtech](http://www.elcamino.edu/academics/indtech)

The manufacturing technology program prepares students for employment in fields related to manufacturing. By completing the degree or certificate requirements, students acquire a foundation in computer aided design, machining, electronics, technical mathematics, and welding. Students also select a career field in which to specialize or broaden their knowledge. These fields include computer aided design/drafting, electronics, environmental technology, machine tool technology, quality assurance, or welding. Competencies will be assessed regularly by student performance in the classroom and laboratory.

#### El Camino College Major Requirements

Machine Tool Technology 101abcd\*; Machine Tool Technology 10A or Computer Aided Design/Drafting 10abcd\*; Machine Tool Technology 2 or Computer Aided Design/Drafting 5; 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\*, 191ab\*, 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, 10K, 11abcd, 103abcd\*, 105abcd\*, 107abcd\*; Manufacturing Technology 2, 70, 75 or 75A and 75B; Welding 1, 2abc, 21, 23abc, 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

#### 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 5; 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\*, 191ab\*, 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, 10K, 11abcd, 103abcd\*, 105abcd\*, 107abcd\*; Manufacturing Technology 2, 70, 75 or 75A and 75B; Welding 1, 2abc, 21, 23abc, 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



#### 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 milling machines. 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 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.

*Note: The two course sequence Manufacturing Technology 75A and 75B is the same as Manufacturing Technology 75.*

### 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.

*Note: The two-course sequence Manufacturing Technology 75A and 75B is the same as Manufacturing Technology 75.*

### 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: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)*

## Marketing See Business



# MATHEMATICS

## A.S. Degree

Mathematical Sciences Division

[www.elcamino.edu/academics/mathsciences](http://www.elcamino.edu/academics/mathsciences)

The degree provides the student with sufficient depth to support a lifelong interest in mathematics, and is suitable for the student who plans to transfer in mathematics. The core of the major is the calculus sequence, in which the student will acquire a conceptual understanding of the principles of differential and integral calculus for functions of one and several variables, as well as the ability to apply calculus techniques in a variety of applications. 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 Notes:

*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 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.

*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

A student who earns an **A, B** or **C** in either **Math 40** or **Math 43** may enroll in either **Math 73** or **Math 80**.

**Intermediate Algebra**

Associate Degree Mathematics Competency Courses

**Math 73**  
Intermediate Algebra for **GE\***  
5 unit, 5 hr lec

OR

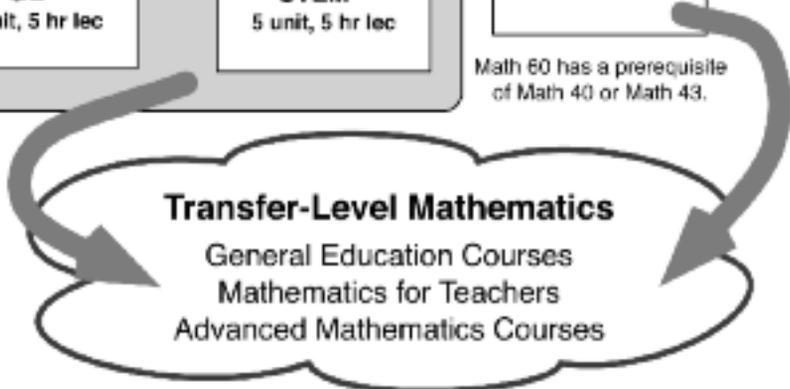
**Math 80**  
Intermediate Algebra for **STEM\*\***  
5 unit, 5 hr lec

**Math 60**  
Geometry  
4 unit, 4 hr lec

Math 60 has a prerequisite of Math 40 or Math 43.

\* General Education

\*\* Science, Technology, Engineering and Mathematics



## 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 basic functions and their graphs, students strengthen and expand their algebra skills. Functions studied include linear, quadratic, polynomial, rational, and radical functions, as well as the absolute value function. Particular emphasis is placed on the operations on functions, solving equations and inequalities, as well as using functions to model real life situations. Other topics include solving systems of equations and applications.

*Note: Mathematics 73 serves as a prerequisite course for all transfer-level mathematics course sequences, except the calculus sequence.*



## Mathematics 80

(formerly Mathematics 70)

### *Intermediate Algebra for Science, Technology, Engineering, and Mathematics*

5 units; 5 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 intermediate algebra course is designed for students who are considering further study in the sciences, technology, engineering, or mathematics. In the context of studying a large library of basic functions and their graphs, students strengthen and expand their algebra skills. The library includes linear, quadratic, polynomial, rational, radical, exponential, and logarithmic functions, as well as inverse functions and the absolute value function. Particular emphasis is placed on the operations on functions, as well as solving equations and inequalities. Other topics include solving systems of equations, operations on complex numbers, and applications.

*Note: Mathematics 80 serves as a prerequisite course for 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: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)*

### 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, numeration, 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 multi-staged 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

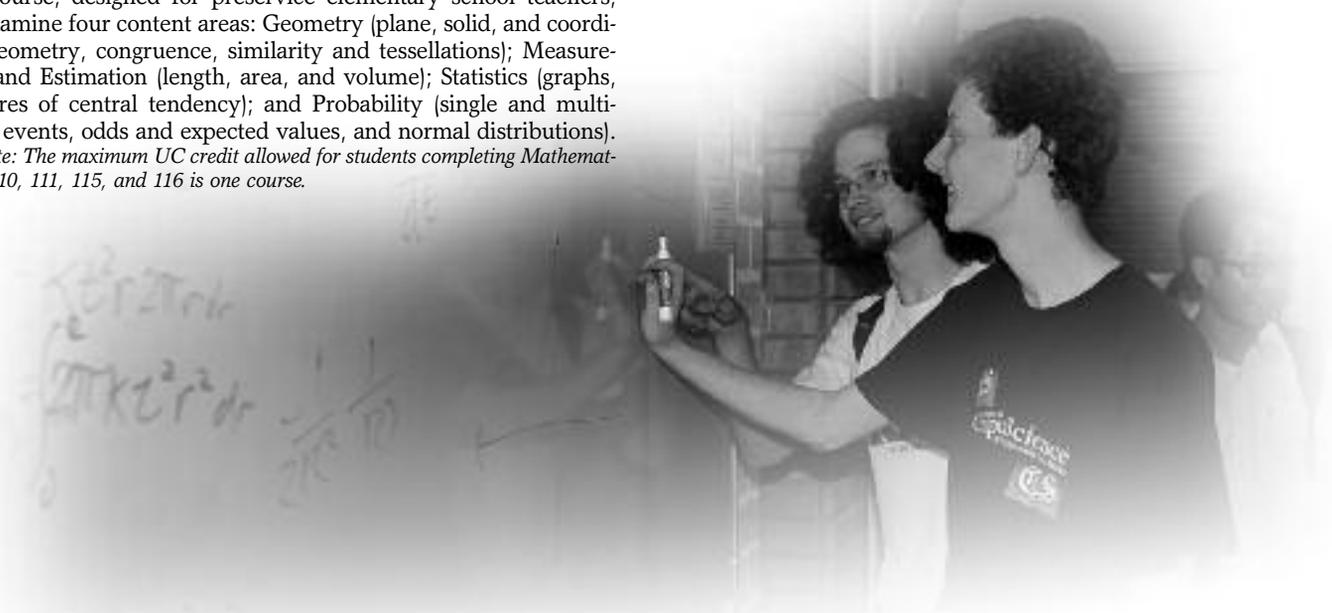
Mathematics 110 with a minimum grade of C in prerequisite or equivalent

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.*

**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*

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 130 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 Analytic 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

#### *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.

## Medicine

### See Pre-Medicine

## Meteorology

### See Geography

## Microbiology

### Microbiology 33

#### *General Microbiology*

5 units; 3 hours lecture, 6 hours lab

*Prerequisite: Biology 10 or Anatomy 30 or Anatomy 32 or Physiology 31 or Anatomy and Physiology 34A; and Chemistry 4 or Chemistry 20 or Chemistry 1A or Chemistry 21A or equivalent with a minimum grade of C in prerequisite*

*Transfer CSU, UC*

This course is a study of microbial anatomy and physiology, classification, microbes in water, air, soil, food, sewage, and medical aspects of microbiology. It also includes the study of fundamental techniques in the growth, culture, and identification of microorganisms. Laboratory experiments are performed by students to reinforce principles of microbiology discussed in lecture. This course is designed for students planning to pursue careers in the health sciences or other life sciences.



# MUSIC

## A.A. Degree

Fine Arts Division

[www.elcamino.edu/academics/finearts](http://www.elcamino.edu/academics/finearts)

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, 20abcd, 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 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 tempi, dynamics, and repeats.

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

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## 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.

## 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 listening skills and an introduction to music of different cultures and styles. Students will attend selected performances.

### 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 covering species counterpoint in two voices. 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, UC*

This course focuses on the techniques, styles, composers/performers, and evolution of rock and roll from the 1950s to the present. Emphasis is placed on the roots and early development of rock music, its stylistic trends, influential artists, and the impact of technology on rock music throughout the years.

## Music 17

### **Music of the Beatles**

3 units; 3 hours lecture

*Recommended Preparation: eligibility for English 1A*

*Credit, degree applicable*

*Transfer CSU, UC*

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*

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 19abcd

### **Voice Class II**

2 units; 2 hours lecture, 1 hour lab

*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 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.

## Music 23abcd

### **Applied Music/Private Lessons**

1 unit; 1 hour lecture, 6 hours lab per week to be arranged

*Corequisite: large ensemble class at El Camino College*

*Enrollment Limitation: audition to establish performance proficiency at an intermediate level before or during the first week of the semester*

*Credit, degree applicable*

*Transfer CSU, UC*

This course is a recital workshop which includes a weekly private lesson. The student is required to practice on campus a minimum of six hours per week, to enroll and participate in a large performing ensemble class at El Camino College, and to attend selected musical events offered by the El Camino College Center for the Arts and in the community. Selected students may perform in a public recital and in occasional master classes.

## Music 30ab

### **Beginning Jazz Improvisation**

2 units; 1 hour lecture, 3 hours lab

*Enrollment Limitation: audition at first-class meeting (ability to perform music of moderate difficulty on 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 selected 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 and intermediate/advanced repertoire representative of the style periods, the Baroque, Classic, Romantic and Contemporary. Attendance at specified musical events at the El Camino College Center for the Arts and in the community is required.

### **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 40abcd**

#### ***The Singer as Actor***

*2 units; 2 hours lecture, 1 hour lab*

*Prerequisite: one semester of Music 18ab with a minimum grade of C or equivalent*

*Credit, degree applicable*

*Transfer CSU, UC*

This performance workshop is designed to introduce and integrate vocal and acting exercises. Emphasis will be placed on observational, interpretive and expressive skills. Many styles of dramatic musical repertoire will be studied and performed. Attendance at selected musical events is required.

### **Music 41abcd**

#### ***Opera Workshop***

*2 units; 1 hour lecture, 3 hours lab*

*Enrollment Limitation: audition*

*Credit, degree applicable*

*Transfer CSU*

This course develops vocal, musical, and dramatic skills through the research, rehearsal, and performance of selected works and scenes from the standard operatic literature.

### **Music 43abcd**

#### ***Beginning Woodwind Instruments***

*2 units; 2 hours lecture, 1 hour lab*

*Credit, degree applicable*

*Transfer CSU, UC*

This course for the beginning musician introduces basic skills and techniques for playing a woodwind instrument. Students select from flute, clarinet, saxophone, oboe, or bassoon. Music reading, tone production, breath control, technique, musicianship, and instrument care are emphasized. Students must provide their own instruments.

### **Music 44abcd**

#### ***Beginning Brass Instruments***

*2 units; 2 hours lecture, 1 hour lab*

*Credit, degree applicable*

*Transfer CSU, UC*

This course for the beginning musician introduces basic skills and techniques for playing a brass instrument. Students select from trumpet, French horn, trombone, euphonium, or tuba. Music reading, tone production, breath control, technique, musicianship, and instrument care are emphasized. Students must provide their own instruments.

### **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 fingering. 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, UC*

In this course, the basic principles of choral technique are introduced through the performance of literature from a variety of style periods. Some of the styles include Renaissance, Baroque, Classical, Romantic, Gospel and Jazz. Student performances are held on and off campus each semester.

**Music 52abcd*****Concert Choir***

*1.5 units; 3 hours lecture*

*Credit, degree applicable*

*Transfer CSU, UC*

This is a non-audition ensemble designed for the study and performance of choral works of various styles. Emphasis is placed on development of the voice in relationship to choral singing and the continuous growth of musicianship appropriate to choral literature. The ensemble will perform in concert at the conclusion of each semester.

*Note: Letter grade or 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.*

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

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### 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:* previous band or orchestra experience or 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 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 orchestral instrument)

*Credit, degree applicable*

*Transfer CSU, UC*

This ensemble rehearses and performs classics from the standard symphony orchestra repertoire. Emphasis is placed on stylistic and historical performance practices, playing techniques, and musicianship. Literature includes works for string and full orchestras, as well as solo and choral accompanying. Concerts are performed on and off campus.

*Note: Letter grade or P/NP option.*

**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****Clarinet 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****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 song writing 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.

### Music 90abcd

#### **Intermediate Applied Music/Private Lessons**

1 unit; 1 hour lecture, 6 hours lab per week to be arranged

*Prerequisite:* four semesters of Music 23abcd with a minimum grade of C

*Corequisite:* large ensemble class at El Camino College

*Credit, degree applicable*

*Transfer CSU, UC*

This course for the continuing Applied Music student is a recital workshop which includes a weekly private lesson. The student is required to practice on campus a minimum of six hours per week, to enroll and participate in a large performing ensemble class at El Camino College, and to attend selected musical events offered by the El Camino College Center for the Arts and in the community. Selected students may perform in a public recital and occasional master classes.

### Music 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 Music field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

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

### Music 99abc

#### **Independent Study**

1-3 units; hours to be arranged

*Enrollment Limitation:* two courses in Music with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work

*Credit, degree applicable*

*Transfer CSU, UC – limitations apply*

This course provides special advanced studies in a subject field of music not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned music projects (60 hours per unit).

*Note:* For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)

### Music 501

#### **The Joy of Music**

0 units; maximum 20 hours lecture per semester;

maximum 15 hour lab per semester

*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 musician-ship. Performances are held on campus and in the community.

### Music 561

#### **Brass 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 brass instrument)

*Non-credit*

These ensembles for the older adult rehearse and perform literature written for combinations of brass instruments. The ensembles include trios, quartets, quintets, and larger ensembles and may be combined with non-brass instruments to complete the instrumentation appropriate to the selected literature. Emphasis is placed on stylistic and historical performance practices, instrumental techniques, and musicianship. Performances are held on campus and in the community.

### Music 562

#### **Percussion Ensembles for the Older Adult**

0 units; 2 hours lecture (maximum of 36 hours per semester)

*Enrollment Limitation:* audition (previous band or ensemble experience or ability to perform music of moderate difficulty on percussion instruments)

*Non-credit*

These ensembles for the older adult rehearse and perform literature written for combinations of melody and/or rhythm percussion instruments. The ensembles include quartets, quintets, sextets, and larger ensembles and may be combined with wind or string instruments to complete the instrumentation appropriate to the selected literature. Emphasis is placed on instrumental techniques, improvisation, and musicianship. Performances are held on campus and in the community.

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

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**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 a n 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 and are held on campus and in the community.

**NURSING****A.S. Degree Registered Nursing**

Health Sciences and Athletics Division  
[www.elcamino.edu/academics/healthsciences](http://www.elcamino.edu/academics/healthsciences)

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.

**Nursing Philosophy:** The Associate Degree Nursing Program supports the mission of El Camino College. The program offers quality, comprehensive educational opportunities and services to its diverse community, specifically those individuals aspiring to obtain the knowledge, skills, and attitudes required of a Registered Nurse.

**Program Length and Licensing Requirements:** The program is two academic years in length after completion of program prerequisites. Acceptance of qualified applicants to the program does not guarantee graduation from the program/college. 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.

**Program Prerequisites for the Associate Degree Nursing Program (Generic)**

1. Complete the following courses with a minimum 2.5 GPA:
  - a. Anatomy 30 or 32, Physiology 31; or Anatomy and Physiology 34A and 34B
  - b. Microbiology 33 (All science courses must have been completed within seven years prior to the date the application for the nursing program is submitted.)
  - c. English 1A (not included in the required basic science 2.5 minimum GPA)
  - d. Mathematics 73 or 80 or pass the Mathematics Competency Exam (not included in the required basic science 2.5 minimum GPA)
2. Complete a Nursing Assessment/Readiness Test with a state recommended passing score.

3. Complete Degrees of Reading Power Test with a passing score of 60 or greater.
4. Cumulative GPA of 2.5 in all courses completed since high school.

### 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.) Please contact counselor to determine course equivalencies.

Nursing 48, 145, 150, 151, 152, 153, 154, 155, 156, 250, 251, 253, 254, 255, English 1B, Psychology 5, Sociology 101

Total Units: 54.5

**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 has implemented this test. Students who have completed the Test of Essential Academic Skills at another campus must go to [www.atitest.com](http://www.atitest.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 and then retake the TEAS test. (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](http://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. Students are encouraged to meet with a counselor. 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.

### 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.

### Upward Mobility Program (LVN Option)

Who is eligible for this option? Individuals eligible for this program includes Licensed Vocational Nurses/Licensed Practical Nurses (LVN/LPNs), Licensed Psychiatric Technicians, and transfer students from accredited nursing program.

### Program Prerequisites:

1. Possession of a current California LVN/LPN license and employment as an LVN/LPN in a bedside nursing position for at least one year.
2. Complete the following courses with a minimum 2.5 GPA:
  - a. Anatomy 30 or 32, Physiology 31; or Anatomy and Physiology 34A and 34B
  - b. Microbiology 33 (All science courses must have been completed within seven years prior to the date the application for the nursing program is submitted.)
  - c. English 1A
  - d. Mathematics 73 or 80 or pass the Mathematics Competency Exam.
3. Complete Degrees of Reading Power Test with a passing score of 60 or greater.
4. Complete a Challenge Exam with a passing score.

### El Camino College Major Requirements

Nursing 48, 149, 154, 155, 156, 250, 251, 253, 254, 255, English 1B, Psychology 5, Sociology 101

Total Units: 39.5

### 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 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](http://www.elcamino.edu/nursing).

### Option II – 30 Unit Non-Degree Track

The Licensed Vocational Nurse may establish eligibility to take the state licensing examination to become a Registered Nurse in California only, by completing a sequence of courses. The Associate Degree is not awarded upon completion of this program and the nurse will always be considered a non-graduate. Applicants are admitted as space is available. For more information, please contact the nursing department.

### General Program Information

Board of Registered Nursing (BRN) Requirements: The BRN has approved a set curriculum at ECC which includes, in addition to nursing 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.

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. Clinical facilities require background checks which require a valid social security number.

**Required Program GPA:** Nursing students must maintain a minimum overall GPA of 2.0 to continue in the nursing program, graduate and receive an Associate in Science degree. Nursing Assistant certification is highly desirable for entry into the nursing program. For more information, visit our website at [www.elcamino.edu/nursing](http://www.elcamino.edu/nursing).

After a student is admitted into the nursing program, a full-time load is considered 10 units per semester. Students are expected to complete their nursing courses at El Camino College. Credit may be granted for course work completed at an accredited nursing program.

**Program Readmission and Course Repetition:** Students who leave the nursing program (self or faculty initiated) are eligible to be readmitted 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.

#### 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](http://www.rn.ca.gov). It is the responsibility of the applicant to present sufficient evidence of rehabilitation. Applicants are advised to explore other career opportunities prior to investing substantial time in a nursing program if it appears that a prior serious act or conviction may jeopardize licensure.

**Bachelor of Science in Nursing:** Students intending to pursue a Bachelor of Science degree in Nursing should consult a Nursing counselor.

### Nursing 48

(formerly Nursing 48ab)

#### **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 50

#### **Special Topics in Nursing**

*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 Nursing 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.

### Nursing 95/96abcd

#### **Cooperative Work Experience Education**

2-4 units; hours to be arranged

*Prerequisite:* Nursing 150 with a minimum grade of C or equivalent or completion of or 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: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)*

### **Nursing 101**

#### ***Exploring Health Occupation Careers***

2 units; 2 hours lecture

*Recommended Preparation: English 84*

*Credit, degree applicable*

This is an introductory course for students considering careers in health care or wishing to become more familiar with the roles of other health care professionals. Students will explore career options and be introduced to the major job responsibilities and technical skill requirements of a variety of health care occupations. The information provided will enable students to match their abilities and interests to a specific health care occupation.

### **Nursing 103**

#### ***Nurse Assistant***

5 units; 3 hours lecture, 6 hours lab

*Prerequisite: Physical examination including a negative tuberculin skin test during the class session or a clear chest x-ray within one year of class session*

*Recommended Preparation: English 84 and Mathematics 12*

*Credit, not degree applicable*

This course prepares the student to function as an entry-level worker on a health care team in a long-term care facility. The focus is on preparing the student to provide direct care to the patient/resident; to promote comfort measures; and collect, record and report data to licensed personnel. Principles of critical thinking, team building, ethics, caring and cultural sensitivity are integrated throughout the course.

### **Nursing 104**

#### ***Home Health Aide***

2 units; 1.5 hours lecture, 1.5 hours lab

*Enrollment Limitation: Nurse Assistant Certificate required*

*Prerequisite: Physical examination including a negative tuberculin skin test during the class session or a clear chest x-ray within one year of class session. Current American Heart Association Cardiopulmonary Resuscitation (CPR) card.*

*Recommended Preparation: English 84 and Mathematics 12*

*Credit, not degree applicable*

This course prepares the Certified Nurse Assistant (CNA) to apply for certification as a Home Health Aide. The student will be prepared to function as an entry-level Home Health Aide on a health care team in a home health agency. The focus will be on providing direct and supportive care to the client; promoting comfort measures; and collecting, recording, and reporting data in the home care setting. Principles of critical thinking, team building, ethics, caring and cultural sensitivity are integrated throughout the course. Upon completion of this course, the student will be eligible for certification by the State of California as a Home Health Aide.

### **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 145**

#### ***Introduction and Preparation for Nursing***

2 units; 2 hours lecture

*Prerequisite: English 1A and Mathematics 73 or Mathematics 80 with a minimum grade of C in each prerequisite course*

*Credit, degree applicable*

*Transfer CSU*

This introductory course examines the nurse's role in hospital and outpatient settings. Through case studies, students will apply and evaluate the impact of the nursing process on clients' health conditions. Specific emphasis is placed on application of the nursing process, critical thinking, therapeutic communication, cultural variation, and computational skills. Students undergo assessment of their individual learning needs and identify campus resources that will assist them in meeting these learning needs.

### **Nursing 149**

#### ***Preparation for Advanced Placement in Nursing***

2 units; 1.5 hours lecture, 1.5 hours lab

*Enrollment Limitation: admission to the Nursing Program*

*Credit, degree applicable*

*Transfer CSU*

This course acquaints Licensed Vocational/Practical Nurses (LVN/LPN), Licensed Psychiatric Technicians (LPT), and transfer students from accredited nursing programs to concepts of nursing as they apply to the El Camino College nursing program. Students will become familiar with the program philosophy, basic needs theory, nursing process, critical thinking, and communication. Course discussion will focus on transition to the registered nursing role and the impact of legal and ethical boundaries on health care delivery. Students will practice basic nursing skills and demonstrate competency.

### **Nursing 150**

#### ***Beginning Nursing Process and Fundamental Skills***

7.5 units; 4 hours lecture, 10.5 hours lab

*Enrollment Limitation: admission to the Nursing Program*

*Credit, degree applicable*

*Transfer CSU*

In this course, students gain the knowledge and skills necessary to provide basic nursing care to the individual and family. The concepts of basic human needs and structural variables such as age, sex, and ethnicity are studied. The nursing process is introduced with emphasis on assessment in the geriatric population. Fundamental skills, such as medication administration, are introduced in the lab and practiced in a clinical setting.

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

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**Nursing 151*****Human Development and Health***

2 units; 2 hours lecture

*Enrollment Limitation: admission to the Nursing Program**Credit, degree applicable**Transfer CSU*

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***

1 unit; 1 hour lecture

*Enrollment Limitation: admission to the Nursing Program**Credit, degree applicable**Transfer CSU*

This course is an introduction to clinical drug therapy. Major content areas include fundamental concepts of pharmacology; groups of therapeutic drugs; prototypes of drug groups; commonly prescribed individual drugs; interrelationships between body systems and drugs; and the role of the nursing process in prescribed drug therapy regimens. Legal and ethical implications will be examined.

**Nursing 153*****Intermediate Nursing Process I***

4.5 units; 2 hours lecture, 7.5 hours lab

*Prerequisite: Nursing 150, Nursing 151, and Nursing 152 with a minimum grade of C in prerequisite**Credit, degree applicable**Transfer CSU*

This course will assist the student to meet the needs of adult clients with moderately severe disease states. Theory and utilization of the nursing process will focus on pathophysiological problems associated with the preoperative and postoperative periods. Students will examine problems associated with physical integrity, respiratory, activity-rest, ingestive, excretory, and sexual needs.

**Nursing 154*****Intermediate Nursing Process and Mental Health***

4 units; 2 hours lecture, 6 hours lab

*Prerequisite: Nursing 150, Nursing 151, and Nursing 152 with a minimum grade of C in prerequisite**Credit, degree applicable**Transfer CSU*

In this course, students will utilize the nursing process in caring for clients with varying degrees of mental health problems. Psychopharmacological therapies will be examined. Students will apply techniques of therapeutic communication, administer medications, and assume a leadership role in the clinical setting. In addition, students will utilize and maintain legal and ethical standards specific to mental health clients.

**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 each 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**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 or Vocational 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 (15 week course)

*Enrollment Limitation: Licensed Registered Nurse who has obtained a clinical site for 24 hours per week of clinical preceptorship in the operating room*

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

*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

*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

*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 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.

### 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 provides special advanced studies in a subject field of Nutrition and Foods not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Nutrition and Foods projects (60 hours per unit).

*Note:* For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)

## 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*

*www.elcamino.edu/academics/business*

**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.

## Paralegal Studies 1

### *Introduction to Paralegal Studies*

2 units; 2 hours lecture

*Recommended Preparation:* eligibility for English 1A

*Credit, degree applicable*

*Transfer CSU*

In this course the student will concentrate on the background and requirements of the paralegal. Included will be the expanded use of paralegals, basic qualifications, training, nature of the work, and career considerations. Topics include the American Legal System, methods of finding and interpreting the law, basic legal concepts and legal terminology, and legal procedures of litigation, mediation, and other non-judicial settlements. Organization and management of the law office are included with an emphasis on ethics for the lawyer and the paralegal. Resumes, interviewing skills, and demeanor in the law office are also discussed.

## Peace Officer

See Administration of Justice

## Pharmacy

See Pre-Pharmacy

# PHILOSOPHY

## A.A. Degree

*Behavioral and Social Sciences Division*

[www.elcamino.edu/academics/behavioralsocial](http://www.elcamino.edu/academics/behavioralsocial)

The degree provides students with a foundation in philosophical inquiry. Upon successful completion, students will understand the major concepts and issues that have shaped philosophical traditions. This will include the ability to critically analyze contemporary social and moral issues and to assess the influential positions on theories of truth and the nature of reality. The student will also be able to analyze the logical structure of arguments and the rules of critical reasoning in their own and others' writing and thinking. Competencies will be assessed regularly through examinations, projects, and written reports. This major prepares students to pursue careers in education, law, health, and other fields where analytical skills are required.

### 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 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 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 7

### *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 problems of evil; the nature of religious language; the existence of miracles; religious experience; and mysticism. The rationality of religious belief will also be examined.

## Philosophy 8

### *Introduction to Logic*

3 units; 3 hours lecture

*Recommended Preparation:* eligibility for English 1A

*Credit, degree applicable*

*Transfer CSU, UC*

This course focuses on the representation of arguments for formal analysis and on the informal fallacies that affect argument strength. The basic elements of propositional and classical logic, informal fallacies, and a brief introduction to predicate logic will be examined.

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

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**Philosophy 10*****History of Ancient and Medieval Philosophy***

3 units; 3 hours lecture

*Recommended Preparation: eligibility for English 1A**Credit, degree applicable**Transfer CSU, UC*

This course offers a chronological examination of Western philosophical thought developed between 600 B.C.E. and 1300 C.E., including the principle ancient and medieval philosophies of this time period. Topics include Greek and Roman thought, and the rise and development of Christianity.

**Philosophy 11*****History of Modern and Contemporary Philosophy***

3 units; 3 hours lecture

*Recommended Preparation: eligibility for English 1A**Credit, degree applicable**Transfer CSU, UC*

This course is a survey of the development of modern and contemporary philosophical thought from the Renaissance to the 21st century. Topics will include secular humanism, the rise of modern science, empiricism, rationalism, idealism, pragmatism, logical positivism, existentialism, and analytic philosophy.

**Philosophy 12*****Existentialism***

3 units; 3 hours lecture

*Recommended Preparation: eligibility for English 1A**Credit, degree applicable**Transfer CSU, UC*

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.

**Philosophy 14*****Asian Philosophy***

3 units; 3 hours lecture

*Recommended Preparation: eligibility for English 1A**Credit, degree applicable**Transfer CSU, UC*

This course examines the central concerns, historic contexts and foundational themes of the diverse philosophical traditions of South and East Asia, including Confucianism, Taoism, Hinduism, Buddhism and Shintoism. Although some attention is given to Western ideas to which Asian thinkers have responded, the main emphasis is given to the different kinds of questions that have engaged Asian thinkers.

**Philosophy 23*****Ethics, Law and Society***

3 units; 3 hours lecture

*Recommended Preparation: eligibility for English 1A**Credit, degree applicable**Transfer CSU, UC*

In this course, the relationship between the various facets of moral and legal thinking is analyzed. Philosophical issues such as justification for the legal enforcement of morality, the legitimacy of an international system of law, the relationship between new technologies and the role of law are examined. The concepts of individual and international rights and obligations will be discussed.

**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: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)*



# PHOTOGRAPHY

## A.S. Degree and Certificate of Achievement

Fine Arts Division

[www.elcamino.edu/academics/finearts](http://www.elcamino.edu/academics/finearts)

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;

six units from: Photography 4, 11ab\* or Journalism 7ab\*, Photography 23B, 54, 57, Art 141abcd\*, Film/Video 22, 34ab (\*one semester); three units from: Art 37ab, 142abcd, Business 11, 12, Physics 11 Recommended Electives: Art 1, 10ab, 143abcd; Business 20, 24 Total Units: 26

### Certificate of Achievement

At least 50% of the courses for the certificate must be taken at El Camino College.

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;

nine units from: Film/Video 34ab, Photography 4, 11ab\* or Journalism 7ab\* (\*one semester), Photography 23B, 54, 57 Total Units: 26

### 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, UC\*

This is a course in black and white still photography with an emphasis on the use of the 4 x 5 view camera, photographic equipment and 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.

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

### 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.

### 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.

Note: Photography 10 is the same course as Journalism 6.

### 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.

Note: The course may be taken two semesters for either Journalism or Photography credit.

Note: Photography 11ab is the same as Journalism 7ab.

**Photography 23A*****Theory of Color/Color Printing***

4 units; 2 hours lecture, 6 hours lab

*Prerequisite: Photography 1 with a minimum grade of C or equivalent*  
*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 with a minimum grade of C*  
*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 50*****Special Topics in Photography****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 Photography 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.

**Photography 51*****Elementary Photography***

2 units; 1 hour lecture, 3 hours lab

*Recommended Preparation: eligibility for English 84**Credit, degree applicable**Transfer CSU, UC\**

This course is an introduction to black and white photography. Instruction emphasizes camera operation and exposure settings, processing and developing, enlarging and printing, and lighting and mounting. Also covered is the critical analysis of the aesthetic and technical merits of photographs.

*Note: This course satisfies the photography requirement for students majoring in journalism.**\*Note: The maximum UC credit allowed for students completing Photography 51 and Photography 1 is one course.***Photography 54*****Intermediate 35mm Black and White Photography***

2 units; 1 hour lecture, 3 hours lab

*Prerequisite: Photography 51 with a minimum grade of C**Credit, degree applicable**Transfer CSU, UC*

In this course students explore intermediate-level black and white 35mm photographic techniques and processes with an emphasis on print quality. Students are introduced to the imaginative use of hand-colored prints, infrared and high contrast graphic films and digital images.

**Photography 57*****Creative Photographic Processes***

2 units; 1 hour lecture, 3 hours lab

*Prerequisite: Photography 54 with a minimum grade of C*  
*Credit, degree applicable**Transfer CSU, UC*

This is a course in creative photography with an emphasis on non-silver based photographic materials, creative black and white photographic processes, and digital processes. This will include the use of non-silver photographic emulsions applied to non-traditional surfaces and the creation of photographic books.

**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: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)***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 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: Photography 151ab is the same course as Art 151ab. Credit is limited to Art 151ab or Photography 151ab.*


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

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## PHYSICAL EDUCATION

### A.A. Degree

Health Sciences and Athletics Division  
www.elcamino.edu/academics/healthsciences

The degree provides an orientation to the profession through participation in diverse physical activities and study of the dimensions of exercise. Students will acquire the ability to utilize principles of human anatomy, physiology, and behavioral processes in a variety of exercise and sport applications. Competencies will be assessed by a student's ability to solve problems in exercise program design and to evaluate movement skills, tactics, and strategies in various physical activities. Upon completion of the program, students will 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, 12abcd, 14ab, 16ab, 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 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

### 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.

### Physical Education Coeducational Activity Courses

#### Physical Education 1abcd

##### *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****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****Boxing***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***1 unit; 3 hours lab**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.***Physical Education 102abcd****Functional Fitness and Aging***1 unit; 3 hours lab**Prerequisite: none**Credit, degree applicable**Transfer CSU, UC\**

This course is designed to develop an understanding of the benefits and health-enhancing values of functional fitness associated with older adults. Balance, mobility, agility and coordination type exercises will be discussed and practiced to promote physical fitness, functional independence, and to reduce the risk of falling. Strength training, cardiovascular exercise and stretching will be performed as they are contributing factors to functional fitness. Training strategies suited for older adults and functional assessments will also be implemented.

*Note: Letter grade or P/NP option.***Physical Education 135abcd****Sport-Specific, Periodized Training for Athletes***1 unit; 2 hours lab**Enrollment Limitation: tryout (high school varsity experience or equivalent skill)**Credit, degree applicable**Transfer CSU, UC*

Students will engage in physical conditioning that is specific to their sport. Training will be periodized with changes in training variables occurring at prescribed intervals and phases of training. Athletes' strengths and weaknesses in performing their sport, will be assessed; injury risk will be identified. Test results, athlete goals, and coaches' input will be used to develop individual training programs to optimize physical conditioning and reduce risk of injury during any phase of the athlete's training.

**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 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.

*Note: Students will pay a user fee for each class meeting for three lanes of bowling, shoes, and bowling ball. Students must furnish their own transportation to and from the bowling alley.*

### 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 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.

*Note: Student will pay a user fee for each class meeting for 3-par 9 holes (short course). Student must provide own transportation to and from the golf 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.

### 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.*

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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 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.

**Physical Education 243abcd****Swimming, Water Safety Instructor**

2 units; 1 hour lecture, 3 hours lab

Recommended Preparation: English 84

Enrollment Limitation: American Red Cross mandates – Level 4 swimming ability and minimum age of 16 years at start of course

Credit, degree applicable

Transfer CSU, UC\*

This course follows the American Red Cross (ARC) Water Safety Instruction (WSI) program and provides an opportunity for instructor certification. Principles and methods of teaching swimming, diving, water aerobics, and water safety are taught. Course activity also includes practice teaching.

Note: Certification requires passing both ARC practical and written examinations.

Note: This course is offered spring semester only.

**Physical Education 244abcd****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.

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

### 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, 54abcd, 74abcd, 101abcd, 102abcd, 204abcd, 224abcd, 238abcd, 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.

Note: Assessments of aerobic fitness, body composition, and muscle strength are provided in the College's Exercise Science Laboratory.

### 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 (VO<sub>2</sub>max), 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 per week to be arranged

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.

**Physical Education Adapted Activity Courses****Physical Education 400abcd****Adapted Fitness**

1 unit; 3 hours lab

Credit, degree applicable

Transfer CSU, UC\*

This course is designed for students with disabilities and provides personalized exercise programs. The components of physical fitness such as body composition, cardiovascular endurance, flexibility and strength will be discussed with an understanding of benefits and training principles. Specialized adaptive exercise equipment is available.

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. Fitness terminology, training principles, and the benefits from resistance exercise will be discussed. Major muscle groups will be identified with their function and application to specific exercises. Specialized adaptive exercise equipment is available.

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.

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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 404abcd**

#### ***Adapted Cardiovascular Fitness***

1 unit; 3 hours lab

Credit, degree applicable

Transfer CSU, UC\*

This course provides cardiovascular exercise for students with disabilities. Aerobic and/or anaerobic conditioning will be performed with an understanding of monitoring exercise intensity. Exercise programs are personalized and self-paced. Fitness terminology, training principles, and benefits associated with cardiovascular exercise will be discussed. Specialized adaptive equipment is available.

*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.*

### **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 both 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**

(formerly Physical Education 5ab)

#### ***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, game tactics, skill development, strength training, and conditioning.

*Note: This course is offered in the fall semester and summer session only.*

### **Physical Education 15abc**

(formerly Physical Education 15ab)

#### ***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**

(formerly Physical Education 20ab)

#### ***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 and training in the exercise techniques and principles required for successful development in cross country distance running and the opportunity for intercollegiate competition. Student athletes will compete against conference schools and other colleges and universities. Note: This course is offered in the fall semester only.

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

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**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 training in the exercise techniques and principles required for successful development in cross country distance running and intercollegiate competition. All students will engage in an off-season program emphasizing instruction, skill development, strength training, and conditioning. Note: This course is offered in the spring semester and summer session only.

**Physical Education 25abc**

(formerly Physical Education 25ab)

**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 and training in the exercise techniques and principles required for successful development in cross country distance running and the opportunity for intercollegiate competition. Student athletes will compete against conference schools and other colleges and universities. Note: This course is 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 training in the exercise techniques and principles required for successful development in cross country distance running and intercollegiate competition. All students will engage in an off-season program emphasizing instruction, skill development, strength training, and conditioning. Note: This course is offered in the spring semester and summer session only.

**Physical Education 35abc**

(formerly Physical Education 35ab)

**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**

(formerly Physical Education 45ab)

**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**

(formerly Physical Education 57ab)

**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.

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

**Physical Education 60abc**

(formerly Physical Education 60ab)

**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 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**

(formerly Physical Education 65ab)

**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. Student athletes 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**

(formerly Physical Education 70ab)

**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.*

**Physical Education 75abc**

(formerly Physical Education 75ab)

**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

*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**

(formerly Physical Education 80ab)

**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**

(formerly Physical Education 85ab)

**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**

(formerly Physical Education 87ab)

**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**

(formerly Physical Education 105ab)

**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.***Physical Education 110abc**

(formerly Physical Education 110ab)

**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 111abc****Off-Season Training for Women'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 women's volleyball. Emphasis is placed on advanced skill training. Offensive and defensive systems, game strategy, and specific conditioning for volleyball are incorporated.

*Note: This course is offered in the fall semester and summer session only.***Physical Education 115abc**

(formerly Physical Education 115ab)

**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 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.*

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

### 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

(formerly Physical Education 120ab)

#### **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 skill development, conditioning, and strategies of the game.

*Note: This course is offered in the fall semester and summer session only.*



### Physical Education 125abc

(formerly Physical Education 125ab)

#### **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 related to competitive swimming.

*Note: This course is offered in the fall semester and summer session only.*

### Physical Education 130abc

(formerly Physical Education 130ab)

#### **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. 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 131abc

#### **Off-Season Training for Women's Intercollegiate Track and Field Team**

1 unit; 2 hours lab

*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

(formerly Physical Education 132ab)

#### **Women's Intercollegiate Badminton Team**

3 units; 10 hours lab

*Enrollment Limitation: tryout (high school varsity or equivalent skill)*

*Credit, degree applicable*

*Transfer CSU, UC*

This course provides women's varsity practice and instruction 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.*

### 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 (formerly Physical Education 233ab)

#### **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 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

### A.S. Degree

Natural Sciences Division

[www.elcamino.edu/academics/naturalsciences](http://www.elcamino.edu/academics/naturalsciences)

The program is designed to provide students the opportunity to obtain a degree upon successful completion of the requirements of a physics transfer major. Upon completion of the program requirements, the student will acquire the ability to use and develop problem solving strategies that apply to physical concepts involving mechanics, thermodynamics, sound, light, electricity and magnetism, and modern physics. Laboratory activities will provide the student with a foundation in measurement and analysis techniques necessary to test, understand, and apply physical concepts. Competency will be assessed by evaluating the student's ability to quantitatively and qualitatively determine the results of physical situations.

#### **Preparation for the 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 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.*

**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 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.

**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, light, geometric and physical optics, special relativity, and atomic and nuclear physics. This course is designed for life science majors requiring a calculus-based physics program.

\*Note: The maximum UC credit allowed for students completing 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 rotational kinematics, translational and rotational 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 assigned laboratory work and/or research projects (60 hours per unit).

*Note: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)*

**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****A.A. Degree***Behavioral and Social Sciences Division**[www.elcamino.edu/academics/behavioralsocial](http://www.elcamino.edu/academics/behavioralsocial)*

This degree provides students with an introduction to political science. Students will acquire knowledge of fundamental political theory and research as well as the principle functions and administrations of the governments of the United States and California. Upon successful program completion, students will be able to describe the methodology and research techniques employed by contemporary political scientists and analyze the organization and operation of California state and local governments. Students also will be able to examine urban problems, regional politics, and intergovernmental relations and their interrelationships with national institutions and policies as well as the international law and international organizations designed to deal with these issues. Competencies will be assessed regularly through examinations, essays, projects, and reports.

**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 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 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 governments will be examined. Emphasis is 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 is placed on freedom of speech, religion and press, rights of the defendant, and equal protection issues 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*

This course will examine the organization and operation of California's state and local governments, as well as intergovernmental issues. Topics will include urban problems, regional politics, and intergovernmental relations. California's relationship 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: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)*



## PRE-DENTISTRY

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### A.S. Degree

*Natural Sciences Division*

[www.elcamino.edu/academics/naturalsciences](http://www.elcamino.edu/academics/naturalsciences)

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

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### A.S. Degree

*Mathematical Sciences Division*

[www.elcamino.edu/academics/mathsciences](http://www.elcamino.edu/academics/mathsciences)

The degree is designed for students planning to transfer into an engineering program. The student will acquire the ability to apply principles of mathematics, physics, and chemistry. Competencies will be regularly assessed through problem solving involving differential and integral calculus of one and several variables; differential equations and linear algebra; mechanics of solids, fluids, heat, sound, electricity and magnetism; chemical reactions and chemical equations.

#### Preparation for the 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

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### A.S. Degree

*Natural Sciences Division*

[www.elcamino.edu/academics/naturalsciences](http://www.elcamino.edu/academics/naturalsciences)

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

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### A.S. Degree

*Health Sciences and Athletics Division*  
[www.elcamino.edu/academics/healthsciences](http://www.elcamino.edu/academics/healthsciences)

This degree is designed for students planning to transfer to a generic nursing program at a university. Upon successful completion of the requirements for the pre-nursing transfer major, students will acquire a foundation in the biological, physical, and social sciences as well as communication skills. This eclectic theory base will provide foundation skills that transfer students will need for practice and advanced education in a baccalaureate program in nursing. Competencies will be assessed through regularly scheduled course examinations.

#### Preparation for the 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

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### A.S. Degree

*Natural Sciences Division*  
[www.elcamino.edu/academics/naturalsciences](http://www.elcamino.edu/academics/naturalsciences)

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

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### A.S. Degree

*Natural Sciences Division*  
[www.elcamino.edu/academics/naturalsciences](http://www.elcamino.edu/academics/naturalsciences)

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.

## Pre-School Teaching

### See Child Development

## PSYCHOLOGY

### A.A. Degree

Behavioral and Social Sciences Division  
[www.elcamino.edu/academics/behavioralsocial](http://www.elcamino.edu/academics/behavioralsocial)

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.*

### 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.

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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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### 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.

### Psychology 99abc

#### Independent Study

1-3 units; hours to be arranged

*Enrollment Limitation:* two courses in Psychology 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 Psychology 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:* For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)



## RADIOLOGIC TECHNOLOGY

### A.S. Degree and Certificate of Accomplishment

Health Sciences and Athletics Division

[www.elcamino.edu/academics/healthsciences](http://www.elcamino.edu/academics/healthsciences)

The radiologic technology (medical x-ray) program is a competency-based health science specialty. The program provides a specialized educational experience which assesses progress through clinical application evaluations and academic course work. Successful completion of the program (degree and certificate) prepares students for employment as skilled medical imaging practitioners and makes them eligible for state and national certification examinations. Program assessment is conducted by monitoring student success rates on the State and National Certification Examinations.

#### General Information

Radiologic Technology courses must be completed with a minimum grade of C before the student may enroll in the next course. For the most up-to-date information about the Radiologic Technology program, please visit the Radiologic Technology website at [www.elcamino.edu/academics/healthsciences/radiologictech](http://www.elcamino.edu/academics/healthsciences/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 73 or 80, 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. Prior to filing an application, transcripts of all academic work completed must be filed in the Office of Admissions and Records.

The application filing period is once a year, during the spring semester. Information about the application process and the application packet is available for download on the Radiologic Technology website.

#### Prior to Starting the Program

Students will be required to attend 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.

#### 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 (ARRT).

#### Certificate of Accomplishment

To be eligible for the Certificate of Accomplishment, the student must have an Associate in Science Degree in Radiologic Technology.

Course Requirements: Radiologic Technology 219, 328

Total Units: 10.5

#### 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 Technol-

ogy 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 continuance 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 minimally acceptable standards of professional conduct for all Registered Technologists and Applicants. The "Rules of Ethics" are intended to promote protection, safety and comfort of patients. Registered Technologists and applicants engaging in any of the conduct or activities noted in the "Rules of Ethics" or in the conviction of a crime, including a felony, gross misdemeanor or a misdemeanor with sole exception of speeding and parking violations, all alcohol and drug related violations are subject to sanctions and must be reported.

Applicants who have questions regarding limitations related to licensure should contact the ARRT directly.



**Radiologic Technology A*****Introduction to Radiologic Technology****3 units; 3 hours lecture**Recommended Preparation: English 84 and Mathematics 23 or 25**Credit, degree applicable**Transfer CSU*

This course provides an introduction to Radiologic Technology as a profession including foundational skills necessary to prepare students planning to enter the Radiologic Technology A.S. Degree Program. Course topics includes educational and career pathways for radiologic technologists, program application procedures, radiographic and digital imaging equipment, principles of radiation production, exposure and quality, image processing, radiation safety, patient care, medical malpractice, professional ethics, and introduction to radiographic examinations.

**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.

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

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**Radiologic Technology 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 Radiologic 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.***Radiologic Technology 106*****Clinical Experience 1****4 units; 12 hours lab to be arranged**Corequisite: enrollment in Radiologic Technology 111 and 123**Enrollment Limitation: admission to the Radiologic Technology Program**Credit, degree applicable**Transfer CSU*

This course provides an environment for the development of skills in patient transportation, darkroom operation, and office and file room protocols. Also included is an orientation to hospital policies and procedures, patient care, professional ethics, principles of radiation exposure, practical aspects of radiation protection, and introduction to patient positioning.

**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 Cardio 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 week 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 cranium radiography, age-specific competencies, and mobile and surgical imaging. In addition, students continue to complete mandatory and elective clinical performance evaluations, as outlined in the course syllabus and student handbook.

### **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 week 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**

### **A.A. Degree and Certificates of Achievement**

*Business Division*

*[www.elcamino.edu/academics/business](http://www.elcamino.edu/academics/business)*

The degree or certificates are designed to provide students with competencies to enter careers in residential and commercial real estate appraisal, escrow, exchange, development, investment, leasing, property management, sales, and title insurance. The program meets legislatively mandated education for the California 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 three options:  
Real Estate Option: Real Estate 12A, 13; 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: 24-25

Real Estate Appraisal Option: Real Estate 16, 41; complete two courses from: Real Estate 14B, 19, 21, 31; complete two courses from: Architecture 150A, Business 15, 28, Computer Information Systems 13, Law 6

Total Units: 27

Mortgage Brokerage Option: Business 1A or Real Estate 16; Real Estate 13, 31; complete two courses from: Real Estate 12A; Real Estate 14B or Business 17; Real Estate 19, 26; complete one course from: Business 5A, 15, 28

Total Units: 27-29

#### **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. Courses must be completed with a 3.0 (B) average. A minimum of 10 units must be completed at El Camino College.

Mortgage Loan Brokerage: Real Estate 11, 13, 14A, 31, 40; Business 1A or Real Estate 16; complete two courses from: Business 17 or Real Estate 14B; Real Estate 12A, 19, 26; complete one course from: Business 5A, 15, 28

Total Units: 27-29

Real Estate: Real Estate 11, 12A, 13, 14A, 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: 24-25

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.

Real Estate 11, 14A, 16, 40, 41; complete two courses from: Real Estate 14B, 19, 21, 31; complete two courses from: Architecture 150A, Business 15, 28, Computer Information Systems 13, Law 6

Total Units: 27

#### **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 11

### **Real Estate Principles**

3 units; 3 hours lecture

*Recommended Preparation:* eligibility for English 1A

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.

*Note: The California Department of Real Estate (DRE) requires completion of this course prior to taking the California Real Estate Salesperson Examination and has approved this course for credit for the DRE broker's license requirement.*

## 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.

*Note: The California Department of Real Estate (DRE) has approved this course as one of the elective courses for the salesperson license, in addition to the required courses of Real Estate Principles and Real Estate Practice. The California Department of Real Estate (DRE) has approved this course as one of the required courses for the real estate broker license.*

## Real Estate 13

### **Real Estate Practice**

3 units; 3 hours lecture

*Recommended Preparation:* Real Estate 11 or current enrollment or California Department of Real Estate (DRE) license or equivalent experience

Credit, degree applicable

Transfer CSU

In this course students will be introduced to the standard forms used in the real estate industry and will learn techniques necessary to close a residential real estate transaction. Students will develop skills in partial preparation for the state examination for a California Department of Real Estate (DRE) license, with emphasis placed on advertising, listings, finance, appraisal, escrow and the tax aspects of real property ownership.

*Note: The California Department of Real Estate (DRE) requires completion of this course prior to taking the California Real Estate Salesperson Examination and has approved this course for credit for the DRE broker's license requirement.*

## Real Estate 14A

### **Real Estate Finance I**

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 provides instruction on the various aspects of finance, including fixed and variable rate loans, conventional and government financing programs, and creative financing options. Students will calculate unpaid loan balance, interest, and loan qualifying ratios.

*Note: This course is approved by the California Department of Real Estate as one of the mandatory eight statutorily required college-level courses for the broker license and for the salesperson license, which also requires real estate principles and real estate practice.*

## 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 provides instruction on the more advanced methods of financing real estate projects, including non-residential commercial and industrial property. Emphasis is placed on the instruments of finance, types of structured loans, discounting leases, and the sale-leaseback transaction.

*Note: The California Department of Real Estate (DRE) has approved this course as one of the elective courses for the real estate broker license.*

## 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 value in real estate, including urban development, governmental policies and requirements for development, as well as the business and real estate cycles.

*Note: The California Department of Real Estate (DRE) has approved this course as one of the elective courses for the salesperson license in addition to the required Real Estate Principles and Real Estate Practice. The California Department of Real Estate (DRE) has approved this course as one of the elective courses for the real estate broker license.*

## 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. Students develop strategies for decision making alternatives for a sale, exchange, continuation of operations, and capital restructure using depreciation, installment sale and tax basis.

*Note: The California Department of Real Estate (DRE) has approved this course as one of the elective courses that may be completed for the salesperson license in addition to the required courses of Real Estate Principles and Real Estate Practice. The California Department of Real Estate (DRE) has approved this course as one of the elective courses for the real estate broker license. The DRE requires a copy of the college course outline or catalog description along with transcript showing proof of course completion.*

**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****Escrows**

3 units; 3 hours lecture

*Recommended Preparation:* Real Estate 11

*Credit, degree applicable*

*Transfer CSU*

This course provides instruction in the functions of an escrow in a real property transaction. Emphasis is on residential escrow, with transactional variations studied for an escrow involving a seller, a buyer, refinance or loan, mobile home, and non-residential specialty escrows including commercial and industrial property, liquor license, impound account, probate and securities transaction. The course covers title insurance, prorations, and escrow settlement closing statements.

*Note:* The California Department of Real Estate (DRE) has approved this course as one of the elective courses that may be completed for the salesperson license in addition to the required Real Estate Principles and Real Estate Practice. The California Department of Real Estate (DRE) has approved this course as one of the optional courses for the real estate broker license.

**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 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 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 in the valuation principles of real estate appraisal, including architectural styles, types of construction, lot valuation, depreciation, the approaches to value, and appraisal standards and ethics.

*Note:* The California Department of Real Estate (DRE) has approved this course as one of the optional courses that must be completed within 18 months of conditional salesperson licensure in addition to the required courses of Real Estate Principles and Real Estate Practice. This course is statutorily required for the California real estate broker license. The 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 41****Advanced Real Estate Appraisal**

3 units; 3 hours lecture

*Prerequisite:* Real Estate 40 with a minimum grade of C or California OREA license or California DRE broker license

*Credit, degree applicable*

*Transfer CSU*

This course provides instruction in advanced concepts of the income approach to value process for real property, analyzing operating expenses, capitalization, and depreciation. Students develop proficiency in utilizing residential income and commercial and industrial property appraisal guidelines to create a standard appraisal form. Emphasis is placed on the advanced cost approach valuation, in addition to the Uniform Standards of Professional Appraisal Practice (USPAP) ethics.

*Note:* The California Department of Real Estate (DRE) has approved this course as one of the elective courses for the real estate broker license. This course is not approved by DRE for the educational requirements for the salesperson license.

**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.

**Real Estate 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 Real Estate/Business field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

*Note:* 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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## RECREATION

### A.A. Degree

Health Sciences and Athletics Division  
[www.elcamino.edu/academics/healthsciences](http://www.elcamino.edu/academics/healthsciences)

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 guidesheet 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.

### Recreation 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 Recreation 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.*

### Recreation 207

#### Introduction to Recreation

3 units; 3 hours lecture

*Recommended Preparation:* eligibility for English A or 84

*Credit, degree applicable*

*Transfer CSU*

This course examines the basic concepts of recreation and leisure as well as the trends in the overall field of recreation services. The course is designed to encourage students to critically examine the field of recreation and how it impacts their lives and those of the individuals in their community.



### 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.

### Recreation 307

#### Camp Counseling: Leadership and Programming

3 units; 3 hours lecture

*Recommended Preparation:* eligibility for English A or 84

*Credit, degree applicable*

*Transfer CSU*

This course covers the history, practices, and philosophy of organized camp and camp counseling. Emphasis is placed on the camp counselor's role in guidance and leadership, analysis of techniques of camp counseling, proper planning, and theory of camping. The operations of day and short-term recreational camps and outdoor camps, as well as professional opportunities in the field, are also examined.



# RESPIRATORY CARE

## A.S. Degree and Certificate of Achievement

*Health Sciences and Athletics Division*  
[www.elcamino.edu/academics/healthsciences](http://www.elcamino.edu/academics/healthsciences)

The degree and certificate in respiratory care are awarded after successful completion of the advanced registry-level respiratory care program. The program is designed for students planning to become California licensed respiratory care practitioners and registered respiratory care practitioners. Completion of the requirements also allows students to apply for all state and national advanced specialty credentialing examinations. Students will acquire the skills to provide a wide range of high technology and high-touch therapeutic interventions to patients in acute and chronic care settings. Competencies are assessed through the use of classroom, laboratory, and clinical performance evaluations in simulated and actual patient care situations. Program success is determined through examining attrition rates, employment rates and licensure exam pass rates.

**Program Prerequisites:** Anatomy 30, Computer Information Systems 13, English 1A, Psychology 5, Respiratory Care 172, 174  
 Total Units: 20

### El Camino Community College Major Requirements

Respiratory Care 176, 178, 280, 282, 286, 288, 289, 290, 294, 295, 298  
 Total Units: 48

Students without previous medical training are strongly advised to complete Respiratory Care 170. Students must complete all other non-respiratory coursework required for the associate in science degree in respiratory care.

### Certificate of Achievement

To be eligible for the Certificate of Achievement, the student must have an Associate in Science Degree in Respiratory Care from El Camino College. A Certificate of Achievement will be granted upon completion of the following course requirements.

**Course Requirements:** Respiratory Care 284, 291, 292, 293, 296, 297  
 Total Units: 26

### General Information

The program has three phases that require specific courses and sequence. For more information go to [www.elcamino.edu/academics/healthsciences/respiratorycare](http://www.elcamino.edu/academics/healthsciences/respiratorycare) and [www.elcamino.edu/faculty/lsinopoli](http://www.elcamino.edu/faculty/lsinopoli).

### 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 in science degree. (See program director and counselor for specific coursework required for the degree in Respiratory Care.)

### 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 semester 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 summer semester each year.

### Initial-Clinical Associate Degree 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 degree which, at a minimum, includes Respiratory Care 176, 178, 280, 282, 286, 288, 289, 290, 294, 295, 298. In addition, the student must complete all other courses required for the associate in science degree in respiratory care if they have not been completed in the preclinical phase. This phase always starts with the admission to Respiratory Care 176 in the summer semester of any given year. The phase ends at the end of the spring semester of the following year with the awarding of the associate degree in respiratory care.

### Final-Clinical Certificate of Achievement Phase

Two semesters of additional classroom/clinical advanced coursework required for the certificate of achievement from the advanced registry-level RC program. The courses in this phase are Respiratory Care 284, 291, 292, 293, 296, 297. This phase of two semesters follows the associate degree phase in the summer and fall of any given year. The phase ends at the end of the fall semester with the awarding of the certificate of achievement in respiratory care.

### 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 thirty-five hundred dollars over a two-year period. Financial assistance is available to students who meet the eligibility requirements.

### Admission Requirements and Length of Program

For the high school graduate with a C average or better in science and math, the program will take 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 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 Respiratory Care 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.*

### 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 174

#### **Introduction to Respiratory Care**

#### **Equipment and Patient Care Procedures**

3 units; 1 hour lecture, 6 hours lab

*Recommended Preparation:* Respiratory Care 170 with a minimum grade of C

*Enrollment Limitation:* high school graduation or equivalent

*Credit, degree applicable*

This course will review operational concepts and procedures for respiratory care equipment. The student will get hands-on experience selecting, assembling and checking respiratory care equipment for proper function, operation and cleanliness. The course will also provide experience performing and understanding the purpose of basic care procedures such as charting, vital signs, bed operation and other respiratory care related basic patient care procedures.

### Respiratory Care 176

#### **Introduction to Respiratory Care of the Non-Critically Ill Patient**

6 units; 3 hours lecture, 9 hours lab per week to be arranged

*Prerequisite:* Respiratory Care 172 and 174 with a minimum grade of C in prerequisite

*Recommended Preparation:* Computer Information Systems 13; Psychology 5

*Enrollment Limitation:* admission to the Respiratory Care Program requiring a completed application and physical exam forms indicating readiness for clinical practice as a Respiratory Care Practitioner

*Credit, degree applicable*

This course deals primarily with the non-critically ill adult patient. It will provide the student with cognitive and psychomotor practice performing basic respiratory care in health service organizations in the South Bay Area. Students receive most of their classroom/cognitive instruction at El Camino College and are rotated during the day, evening and/or night shifts to clinical affiliates.

*Note: It is strongly advised that all non-respiratory care courses required for the Respiratory Care Associate in Science degree be completed prior to enrollment in this course.*

### Respiratory Care 178

#### **Respiratory Care of the Critically Ill Patient I**

8 units; 4 hours lecture, 12 hours lab per week to be arranged

*Prerequisite:* Respiratory Care 176 with a minimum grade of C

*Credit, degree applicable*

This course is an introduction to the practice of respiratory care in intensive care units with an emphasis on patient ventilator interaction. The student will manage critically ill patients on prolonged artificial ventilation using microprocessor-driven ventilators, alarms, arterial blood gases and other appropriate techniques and equipment. Students are rotated through evening, night and day critical care units in hospitals.

### 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.

**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.

**Respiratory Care 289*****Advanced Respiratory Care of the Asthmatic Patient***

3 units; 2 hours lecture, 3 hours lab per week to be arranged  
*Enrollment Limitation: Students must be admitted to the El Camino College Respiratory Care Program or be graduated from an accredited respiratory care program.  
 Credit, degree applicable*

This course provides instruction in asthma management associated with advanced respiratory care. Topics include diagnosing and assessing the severity of asthma; medications; ability to treat asthma in an ambulatory setting; special considerations in childhood asthma; the use of pulmonary function testing and peak flow monitoring to diagnosis and manage asthma; identifying allergic sensitivities and promoting allergen avoidance; as well as being able to develop and implement asthma action plans.

**Respiratory Care 290*****Advanced Specialty Respiratory Gases***

2 units; 1 hour lecture, 3 hours lab per week to be arranged  
*Enrollment Limitation: Students must be admitted to the El Camino College Respiratory Care Program or be graduated from an accredited respiratory care program.  
 Credit, degree applicable*

This course provides instruction in respiratory specialty gases. Topics include the physiology of nitric oxide and heliox specialty gases, indications for use, contraindications, dose and dose titration, hazards, as well as the delivery and monitoring of each gas.

**Respiratory Care 291*****Advanced Specialty Ventilators and Specialized Oxygen Delivery Devices***

3 units; 2 hours lecture, 3 hours lab per week to be arranged  
*Enrollment Limitation: Students must be admitted to the El Camino College Respiratory Care Program or be graduated from an accredited respiratory care program.  
 Credit, degree applicable*

This course provides instruction in specialty ventilators and oxygen delivery devices. Topics include high frequency oscillatory ventilation; high frequency jet ventilation; Vapotherm; SiPAP; and T-Piece Resuscitation. The indications, contraindications, and appropriate delivery will be discussed and reviewed for multiple patient populations.

**Respiratory Care 292*****Advanced Clinical Application and Interpretation of Blood Gases***

2 units; 2 hours lecture  
*Enrollment Limitation: Students must be admitted to the El Camino College Respiratory Care Program or be graduated from an accredited respiratory care program.  
 Credit, degree applicable*

This course provides instruction in respiratory clinical application of blood gases. Topics include the fundamentals of acid-base and respiratory physiology; assessment and interpretation of blood gas values; blood gas values applied to patient care; validation of results with other modalities; and appropriate methods to collect, analyze, and report blood gas results.

**Respiratory Care 293*****Cardiac Monitoring in Advanced Respiratory Care***

4 units; 3 hours lecture, 3 hours lab  
*Enrollment Limitation: Students must be admitted to the El Camino College Respiratory Care Program or be graduated from an accredited respiratory care program.  
 Credit, degree applicable*

This course provides instruction in cardiac monitoring associated with advanced respiratory care. Topics include twelve-lead Electrocardiogram interpretation; central venous pressure; Pulmonary Artery Pressure; Cardiac Index; and usage of pressure transducers, pulmonary and arterial catheters, as well as treatment of cardiac conditions using electrolytes, cardiac medications and diuretics. Laboratory experiments and clinical visitation will be used to complement the didactic instruction.

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

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### Respiratory Care 294

#### *Pulmonary Function Testing in*

#### *Advanced Respiratory Care*

4 units; 3 hours lecture, 3 hours lab

*Enrollment Limitation: Students must be admitted to the El Camino College Respiratory Care Program or be graduated from an accredited respiratory care program.*

*Credit, degree applicable*

This course provides instruction in pulmonary function testing associated with advanced respiratory care. Topics include metabolic measurements using indirect calorimetry; pediatric pulmonary function testing; cardiopulmonary exercise testing; sleep studies; and bronchoscopy. Laboratory experiments and clinical visitation will be used to complement didactic instruction.

### Respiratory Care 295

#### *Pharmacology in Advanced Respiratory Care*

3 units; 3 hours lecture

*Enrollment Limitation: Students must be admitted to the El Camino College Respiratory Care Program or be graduated from an accredited respiratory care program.*

*Credit, degree applicable*

This course provides instruction in pharmacology associated with advanced respiratory care. Topics include current trends in respiratory pharmacology; the use of sedatives, analgesics, antibiotics, and paralytic agents in various delivery forms during advanced therapeutic modalities; as well as other pharmacological agents used during specialized testing regimens.

### Respiratory Care 296

#### *Physical Examination in Advanced Respiratory Care*

4 units; 3 hours lecture, 3 hours lab

*Enrollment Limitation: Students must be admitted to the El Camino College Respiratory Care Program or be graduated from an accredited respiratory care program.*

*Credit, degree applicable*

This course provides instruction in physical examination associated with advanced respiratory care. Topics include physical assessment; collection of lab data; the interview process; and current imaging studies.

### Respiratory Care 297

#### *Cardiac Monitoring in Advanced Respiratory Care*

4 units; 3 hours lecture, 3 hours lab

*Enrollment Limitation: Students must be admitted to the El Camino College Respiratory Care Program or be graduated from an accredited respiratory care program.*

*Credit, degree applicable*

This course provides instruction in perinatology and pediatrics associated with advanced respiratory care. Topics include respiratory care monitoring; diagnostics; advanced concepts in emergency procedures; and current topics in perinatal and pediatric respiratory care. Laboratory experiments and clinical visitation will be used to complement lectures.

### Respiratory Care 298

#### *Advanced Emergency Management*

3 units; 2 hours lecture, 3 hours lab per week to be arranged

*Enrollment Limitation: Students must be admitted to the El Camino College Respiratory Care Program or be graduated from an accredited respiratory care program.*

*Credit, degree applicable*

This course provides instruction on the role of the respiratory therapist during disaster management. Topics include intra-hospital transport; land and air transport; rapid response teams; distinguishing the various color codes within a hospital; disaster preparedness at the federal, state, and local levels; and the requirements for disaster preparedness within the hospital.

## SCHOOL HEALTH CLERK

### Certificate of Achievement

Health Sciences and Athletics Division

[www.elcamino.edu/academics/healthsciences](http://www.elcamino.edu/academics/healthsciences)

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;

three units from: Child Development 104, 107, 108, 114, 122, 150, 152, 160, 163, 166, Nursing 116, 118, Nutrition and Foods 15, Sign Language/Interpreter Training 15

Total Units: 18

## Secretarial

See Business

## Shop Mathematics

See Technical Mathematics



# SIGN LANGUAGE/ INTERPRETER TRAINING

## A.A. Degree and Certificate of Achievement

Health Sciences and Athletics Division  
www.elcamino.edu/academics/healthsciences

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 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.*

### 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.

### 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.

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

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### 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

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Sign Language/Interpreter Training 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.

### Sign Language/Interpreter Training 101abcd

#### **Individualized American Sign Language Laboratory**

1 unit; 3 hours lab per week to be arranged  
Prerequisite: Sign Language/Interpreter Training 15 with a minimum grade of C or concurrent enrollment  
Credit, not degree applicable

This laboratory course provides opportunities for practice and further development of American Sign Language (ASL) skills. Self-paced study allows students to improve both signing and comprehension skills. Interactive exercises and visual media will be utilized to reinforce vocabulary and syntax.

Note: Pass/no pass only

### 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 realm of deafness from both a hearing and deaf perspective. Current topics and issues include sign language, language acquisition, educational trends, experiments and research. Students will gain an understanding of psychological and social implications of deafness. Causes of deafness and modern technological advances are explored.

### 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; 1 hour lecture; 2 hours lab  
Prerequisite: Sign Language/Interpreter Training 15 with a minimum grade of C  
Credit, degree applicable  
Transfer CSU

This course is designed to provide beginning and advanced practice with the sign language component known as fingerspelling. Skill development for expressive and receptive fingerspelling, numerical concepts, and lexicalized signs will enhance the student's ability to comprehend and utilize fingerspelling with accuracy and clarity.

Note: Pass/no pass only

### 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

**Sign Language/Interpreter Training 264****Sign to Voice Laboratory**

1 unit; 3 hours lab

*Prerequisite:* Sign Language/Interpreter Training 18B with a minimum grade of C

*Corequisite:* Sign Language/Interpreter Training 19

*Credit, degree applicable*

*Transfer CSU*

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*

*www.elcamino.edu/academics/behavioralsocial*

The sociology degree provides students with a foundation in the science of sociology. Upon successful completion of the program requirements, the student will acquire an understanding of major sociological concepts and theoretical perspectives on social problems and social life as they apply to the individual, group, and society. Students will also understand the principles of research methods and data analysis. The major prepares students for 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 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*

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Sociology 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.*

**Sociology 99abc****Independent Study**

1-3 units; hours to be arranged

*Enrollment Limitation:* two courses in Sociology 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 Sociology 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: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)*

**Sociology 101****Introduction to Sociology**

3 units; 3 hours lecture

*Prerequisite:* eligibility for English 1A

*Credit, degree applicable*

*Transfer CSU, UC*

In this course students analyze the influence of the social environment on behavior and social life, using sociological theoretical perspectives and research methods. Components of culture and social structure are critically examined through sociological theories and concepts, including socialization, deviance, and social change. Students will evaluate social institutions in American society, as well as analyze social stratification and inequality relative to social class, ethnicity, and gender.

**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.

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

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### **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 students examine social problems facing societies today. 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**

#### ***Issues of Race and Ethnicity in the United States***

3 units; 3 hours lecture

*Recommended Preparation: Sociology 101; eligibility for English 1A*

*Credit, degree applicable*

*Transfer CSU, UC*

In this course students examine issues of race and ethnicity in the United States from a sociological perspective. Sociological concepts and theories are used to analyze the current and historical experiences of groups which are defined in racial and ethnic terms, and to assess how these definitions and experiences influence the current status and attainments of these groups in American society.

### **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**

#### ***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.



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

# SPANISH

## A.A. Degree

Humanities Division

[www.elcamino.edu/academics/humanities](http://www.elcamino.edu/academics/humanities)

By completing the degree requirements, the student will acquire proficiency in speaking, reading, writing, and understanding Spanish and will gain knowledge of Spanish and Spanish-American culture. The student will be able to communicate in Spanish, write formal compositions, and read the 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 52A and 52B; 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 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 everyday 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 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.

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

## 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, UC

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.



## Spanish 52A

### **Spanish for Native Speakers**

3 units; 3 hours lecture

Recommended Preparation: native-speaking knowledge of Spanish

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: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)

## Special Education

See Educational Development

## Speech Communication

See Communication Studies

## 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.*

## 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

### A.A. Degree

*Fine Arts Division*

[www.elcamino.edu/academics/finearts](http://www.elcamino.edu/academics/finearts)

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 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 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 study of the techniques, styles, and disciplines of acting. The student is provided theory and practical experience with varied characterizations. Emphasis is placed on individual growth and acquired skills demonstrated through play and character analysis followed by presentation of scenes from contemporary realistic plays. Attendance is required at selected theatre events offered by the El Camino College Center for the Arts and in the community.

### 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.

### 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 is an acting workshop in which 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 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.

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

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**Theatre 75abcd*****Student Performance Production Workshop***

1 unit; 3 hours lab per week to be arranged

*Recommended Preparation:* completion of or concurrent enrollment in the following:

1. Student performers: Theatre 8 or 14A
2. Student directors: Theatre 40A
3. Student crews: Theatre 84 or 90 or 92 or 97abcd
4. 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.

**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 chiefs. 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).

**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: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)*



## TRANSFER STUDIES

### Certificates of Achievement

*Behavioral and Social Sciences Division*  
[www.elcamino.edu/academics/behavioralsocial](http://www.elcamino.edu/academics/behavioralsocial)

#### 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 Segmental 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 for completing transfer admission requirements.

Total Units: 34

## Tutor Training

### Tutor Training 200

#### *Theory and Practice of Tutoring*

*1 unit; 1 hour lecture*

*Credit, degree applicable*

*Transfer CSU*

This course is designed for students who intend to be tutors. It meets the College Reading Learning Association training program requirements and is designed to help student tutors learn to communicate clearly and effectively with students needing academic assistance. Course content includes learning theories, tutorial techniques, program procedures and responsibilities, and tutoring practice.

*Note: To be considered for El Camino College employment as a tutor, students need to have completed the course they wish to tutor with a final grade of B or better. The recommendation of the appropriate instructor is also necessary.*

*Note: Pass/no pass only.*



## WELDING

### A.S. Degree and Certificates of Achievement

Industry and Technology Division  
[www.elcamino.edu/academics/indtech](http://www.elcamino.edu/academics/indtech)

The welding program prepares the student for employment in the field and provides opportunities for currently employed personnel to upgrade their skills. By completing the degree or certificate requirements, students gain proficiency in the following welding processes: oxy-acetylene cutting, plasma arc cutting, shielded metal arc welding, gas metal arc welding, gas tungsten arc welding, and flux cored welding. Students develop skills in welding ferrous and non-ferrous alloys in flat, horizontal, vertical, and overhead positions. In addition, welding students gain skills in layout, fabrication, reading engineering drawings, 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

Complete a minimum of 24-25 units from: Welding 2abc, 21, 40abcd, 45ab

Recommended Electives: Welding 23abc, Computer Aided Design/Drafting 5, Machine Tool Technology 16ab\* (one semester), Technical Mathematics 1

Total Units: 24-25

#### Certificates of Achievement

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

Complete 24-25 units from any course combination below:

Welding 2abc, 21, 40abcd, 45ab;

complete 9-12 units from: Welding 23abc, Computer Aided Design/Drafting 5, Machine Tool Technology 16ab\*, Technical Mathematics 1, English A or qualifying score for English 1A on English Placement Test (\*one semester)

Total Units: 24-25

#### Welding 2abc

##### *Basic Welding Technology*

8 units; 5 hours lecture, 10 hours lab

Prerequisite: Welding 1 or 21 with a minimum grade of C in prerequisite or equivalent

Credit, degree applicable

Transfer CSU

This is an intermediate welding course with emphasis on the weldability of mild steel, low-alloy steel, stainless steel, cast iron and aluminum utilizing all of the appropriate welding processes. The course will include welding safety, nomenclature, weld symbols and Los Angeles City Structural Certification specifications.

#### 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, oxy-acetylene, shielded metal arc welding, and gas metal arc welding. Skills will be developed in cutting and welding in the flat and horizontal 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 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, and weld symbols.

#### 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: For eligibility requirements go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)

# Women's Studies

## Women's Studies 1

### *An Introduction to Women's Studies*

3 units; 3 hours lecture

Recommended Preparation: eligibility for English 1A

Credit, degree applicable

Transfer CSU, UC

This interdisciplinary course introduces students to the field of women's studies. The history of feminism, feminist thought, and women's studies as an academic discipline will be examined and assessed. The social construction of sex, gender, and sexuality, the representation of women in American society, and the role of women in American institutions will be analyzed from theoretical perspectives of various academic disciplines. Feminist perspectives will be utilized to critically analyze race, ethnicity, social class, sexuality, and age as they correlate with sex and gender in American society.

# Woodworking

## See Construction Technology



# X-Ray Technology

## See Radiologic Technology

# Zoology

## See Biology

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

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## 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**  
*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

**Claudia Lee**  
*Academic Affairs*

**David Vakil**  
*Academic Affairs,  
El Camino College Compton Center*

## Directors/Managers

**Michelle Arthur**  
*Enrollment Services*

**Kim Bailly**  
*Nursing*

**Robert Barbone**  
*Athletic Director*

**Leisa Biggers**  
*Staff and Student Diversity*

**Rocky Bonura**  
*Business Services*

**Julie Bourlier**  
*Bookstore*

**Rebecca Cobb**  
*Student Development*

**Tom Connolly**  
*Accounting*

**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*

**Lynn Lindberg**  
*Human Resources*

**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*

**John Wagstaff**  
*Information Technology Services*

## 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*

**Tyler Robbins**  
*Financial Aid and Scholarships*

**Betty Sedor**  
*Community Education and Development*

**Satish Warriar**  
*Information Technology Services*

## Specially Funded Programs

**Pauline G. Annarino**  
*Director, Western Region  
Interpreter Education Center*

**Eldon Davidson**  
*Director, Contract and Community Education*

**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*

## 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.

**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.

## Academic Senate Officers

Chris Gold, *President*

Saul Panski, *Vice President,*

*Compton Community Educational Center*

Christine Jeffries, *Vice President,*

*Educational Policies*

Britta Halonen and Cristina Pajo,

*Co-Vice Presidents, Faculty Development*

Lance Widman, *Vice President,*

*Finance and Special Projects*

Chris Wells, *Vice President,*

*Legislative Action*

Claudia Striepe, *Secretary*

Jenny Simon, *Curriculum Chair*

## A

### Ackerman, Amanda (2006)

*Lecturer, English*  
B.A. Wellesley College  
M.F.A. California Institute of the Arts

### Ahmadpour, Alireza (2004)

*Associate Professor, Art*  
B.S. Pars High Institute  
M.A. California State University, Los Angeles

### Ahn, Rebecca (1996)

*Lecturer, Japanese*  
B.F.A. University of Washington  
M.A. Biola University  
M.A. University of Southern California

### Aitken, Deborah (1987)

*Lecturer, Music*  
B.M. University of Southern California  
M.A. California State University, Northridge

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B.A., M.A. University of California, Santa Barbara  
M.A. California State University, Dominguez Hills  
Ed.D. University of Southern California
- Soden, Juli (2007)**  
*Instructor, Human Development*  
B.A. Fort Hays State University  
M.A. Baker University  
M.A. California State University, Dominguez Hills  
Ed.D. University of Southern California
- Solomita, Lynn (2010)**  
*Interim Vice President, Human Resources*  
B.A. University of California, Los Angeles  
J.D. University of West Los Angeles School of Law
- Somin, Cynthia F. (1987)**  
*Professor, English*  
A.A. El Camino College  
B.A. California State University, Long Beach  
M.A. California State University, Dominguez Hills
- Sotolongo, Carmen R. (1988)**  
*Professor, Spanish*  
B.A. University of California, San Diego  
M.A. San Diego State University
- Stallings, Michael L. (1981)**  
*Professor, Architecture*  
A.A. El Camino College  
B.S. University of Southern California

**Stanbury, Corey (1988)**

*Professor, Physical Education*  
B.A. University of California, Santa Barbara  
M.Ed. Azusa Pacific University

**Ste. Marie, Susan (1992)**

*Lecturer, Photography*  
B.A., M.F.A. California State University, Fullerton

**Steinberg, Margaret (2004)**

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B.A., M.A. California State University, Fullerton

**Stephens, Kathleen (1992)**

*Professor, Nursing*  
A.A. El Camino College  
B.S.N. Mount St. Mary's College  
M.S.N. California State University, Dominguez Hills

**Stevens, Christopher M. (2002)**

*Lecturer, German*  
B.A. University of Oklahoma  
M.A. Middlebury College  
Ph.D. University of Michigan

**Stewart, Thomas (1983)**

*Lecturer, Chemistry*  
B.S., M.S. University of California, Los Angeles

**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

**Stoddard, Patricia (2005)**

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B.S., M.S. California Institute of Technology  
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**Stohrer, Susan (1996)**

*Lecturer, Physical Education*  
B.A. Furman University  
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**Stone, Kell J. (2004)**

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B.A. Eastern Michigan University  
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**Storms, Harrison (2001)**

*Professor, Art*  
B.F.A., M.F.A. Otis Art Institute

**Story, Howard G. (1983)**

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Distance Education & Media Services*  
B.A. Pacific University  
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**Striepe, Claudia (1998)**

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B.A. University of Natal, Durban  
H.D.L.S., H.D.E. Unisia

**Stupy, Michael W. (1994)**

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**Suarez, Jason (2001)**

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**Suekawa, Lori (2005)**

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**Swendson, Paul D. (2001)**

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**T**

**Tadele, Gizaw (2000)**

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**Takamine, Eric (2000)**

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**Takemori, Kanzo (1996)**

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**Taylor, Ralph (2002)**

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Computer Science*  
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**Taylor, Susan (1992)**

*Professor, Mathematics*  
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**Tellier, Bruce (1990)**

*Lecturer, Music*  
B.A. Berklee College of Music  
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**Teter, F. Dane (1993)**

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**Thomas, Mark (1981)**

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B.A. Ambassador College

**Thompson, Darrell E. (2005)**

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**Thompson, Douglas M. (1994)**

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**Thompson, Jacquelyn (1999)**

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Computer Information Systems*  
A.S. El Camino College  
B.S., M.B.A. California State University, Long Beach

**Thompson, Mercedes A. (1984)**

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B.A. Douglass College, Rutgers University  
M.S. Pepperdine University  
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**Thornton, Shantel (2008)**

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**Thureson, Joan I. (1971)**

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**Tino-Sandoval, Cindy (2001)**

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**Tontcheva, Ana (2007)**

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**Trench, Simon (1996)**

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B.Sc.Hon. University of Toronto, Scarborough  
B.Ed. University of Toronto, St. George  
M.D. Universidad Technologica de Santiago

**Trepasso, Sandra (1987)**

*Lecturer, Art*  
B.A. Michigan State  
M.A. Case Western Reserve  
M.F.A. Arizona State University

**Trevis, Michael (2008)**

*Chief of Police, Director of Public Services  
Instructional Programs  
Professor, Administration of Justice*  
B.S., M.S. University of La Verne

**Trites, Matthew (1991)**

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A.A. El Camino College

**Tummers, Susan A.M. (2000)**

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**U**

**Ueda, Dale T. (1999)**

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**Uyemura, Evelyn (2001)**

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English as a Second Language*  
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## V

- Vacca, Patricia (1985)**  
*Professor, Computer Information Systems*  
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M.S.T. American University  
J.D. Southwestern University
- Vakil, David (2000)**  
*Professor, Astronomy, Physics*  
B.S. University of Arizona  
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- Valladares, Daniel (1998)**  
*Lecturer, Computer Aided Design/Drafting*  
Industry experience
- Valle, Anne (2010)**  
*Instructor, Anatomy, Biology, Physiology*  
B.S. California State University, Dominguez Hills  
Ph.D. University of California, San Diego
- Van Enoo, Sharon (1984)**  
*Professor, Academic Strategies*  
B.A., M.A. California State University, Dominguez Hills
- Van Kanegan, Steve (1993)**  
*Lecturer, Physical Education*  
B.S., M.S. Western Illinois University
- Vaughan, Dexter (2008)**  
*Instructor, Counselor*  
B.S. California State University, Long Beach  
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- Verge, Arthur (1989)**  
*Professor, History*  
A.A. Santa Monica City College  
B.A. University of California, Santa Barbara  
M.P.A., M.A., Ph.D. University of Southern California
- Vertullo, Kathy (2004)**  
*Lecturer, English*  
B.S. Iowa State University  
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- Villaroman, Emmanuel E. (2002)**  
*Lecturer, Electronics and Computer Hardware Technology*  
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Industry experience

## W

- Wagner, Helene (2010)**  
*Lecturer, Speech*  
B.A. Moorhead State University  
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- Walker, Rhonda (1996)**  
*Lecturer, Reading*  
B.A. University of Houston  
M.A. University of Southern California
- Walls, Philip D. (1994)**  
*Lecturer, Air Conditioning and Refrigeration*  
A.A. El Camino College  
Industry experience
- Wang, Erxiang (2002)**  
*Lecturer, Mathematics*  
B.S. Fudan University  
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- Wang, Lijun (1998)**  
*Professor, Mathematics, Computer Science*  
B.S. Liaoning University  
M.S. Dalran Institute of Technology  
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- Wapner, Leonard M. (1974)**  
*Professor, Mathematics*  
B.A., M.A.T. University of California, Los Angeles
- Warren, Shirley T. (2002)**  
*Lecturer, Fashion*  
A.A. Watterson College  
B.A. Murray State University  
M.A. California State University, Northridge  
Industry experience
- Warren, Sue E. (1987)**  
*Lecturer, Nutrition and Foods*  
B.S. Michigan State University
- Warren III, William E. (2004)**  
*Lecturer, Fire and Emergency Technology*  
A.A. Palomar College  
Industry experience
- Waters, Marianne C (2005)**  
*Associate Professor, Anthropology*  
B.A., M.A. California State University, Fullerton
- Waterworth, Stephan V. (1985)**  
*Professor, English*  
B.A., M.A. University of California, Los Angeles  
Ph.D. University of Southern California
- Wells, Rex Christen (2005)**  
*Professor, Communication Studies*  
B.A., M.A. California State University, Long Beach
- Welsh, Lauralee W. (1997)**  
*Professor, English*  
B.A. Loyola University, New Orleans  
M.A. University of Southern California  
M.A. California State University, Dominguez Hills
- Weyh, Lisa Marie (2000)**  
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B.A. University of Southern California  
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- Whitaker, Carl (1996)**  
*Lecturer, Fire and Emergency Technology*  
Industry experience
- White, Maria D. (2009)**  
*Instructor, Nursing*  
B.S.N. California State University, Dominguez Hills  
M.S.N., NP, University of California, Los Angeles
- Whitney, Karen (2005)**  
*Associate Professor, Art*  
B.A., M.A. Brigham Young University
- Widman, Lance G. (1971)**  
*Professor, Political Science*  
B.A., M.P.A. University of California, Berkeley  
M.A. Occidental College
- Wietting, John (1988)**  
*Lecturer, English*  
B.A., M.A. Southern Illinois University  
Ph.D. University of Southern California
- Williams, Rachel (2009)**  
*Instructor, English*  
B.A. University of California, Los Angeles  
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- Willcocks, Angela (2010)**  
*Instructor, Ad/Web Design*  
B.A. Sydney College of the Arts  
M.F.A. Georgia State University  
M.F.A. University of California, Irvine
- Winfree, Merriel (2005)**  
*Associate Professor, Cosmetology*  
A.A. El Camino College
- Winkler, David D. (2004)**  
*Lecturer, Fire and Emergency Technology*  
Industry experience
- Wise, Joyce K. (2000)**  
*Lecturer, Nursing*  
B.S.N. Azusa Pacific University  
M.S.N. University of Phoenix
- Wong, Jan (2010)**  
*Lecturer, Sign Language/Interpreter Training*  
A.A. Golden West College  
B.S. California State University, Fullerton
- Wong, Rich (1999)**  
*Lecturer, Mathematics*  
B.A., M.S. California State University, Sacramento
- Woo, Jung (2002)**  
*Lecturer, Mathematics*  
B.S., M.S. Yonset University  
Ph.D. University of Arizona
- Wozniak, Paul H. (1977)**  
*Professor, Mathematics*  
B.A. Gannon College  
M.A. University of Detroit  
Ph.D. Ohio State University
- Wright, Wendy (1986)**  
*Lecturer, English*  
B.A., M.A. California State University, Long Beach  
Rhetoric and Composition Certificate, California State University, Dominguez Hills
- Wu, Xiaowen (2000)**  
*Lecturer, Chinese*  
B.A. Shanghai University  
M.A., ESL Certificate California State University, Long Beach
- Wyatt, Karen (1992)**  
*Lecturer, Physical Education*  
A.A. Santa Monica City College  
B.A. University of California, Riverside  
M.A. University of California, Los Angeles
- Wynne, Michael (1999)**  
*Professor, Psychology*  
B.A. University of California, Los Angeles  
M.A., M.P.A. California State University, Long Beach  
Ph.D. University of California, Berkeley

## Y

- Yamashita, Mitsura (1967)**  
*Lecturer, Administration of Justice, Physical Education*  
B.S. California State University, Long Beach
- Yang, Christie (2000)**  
*Lecturer, Mathematics*  
B.A. Taiwan 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*  
B.S. California State Polytechnic University,  
San Luis Obispo  
M.A. Yale University  
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**Yoshida, Nina A. (1997)**

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B.A., M.A., C.Phil. University of California, Los Angeles

**Young, Janet (1996)**

*Professor, Child Development*  
B.A. Antioch University  
M.A. California State University, Dominguez Hills  
Ed.D. California State University, Long Beach

**Yun, Paul M. (1997)**

*Professor, Mathematics*  
B.A. University of California, Berkeley  
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Ed. M. Harvard University

**Z**

**Zartman, Charleen (1977)**

*Professor, Physical Education*  
A.A. El Camino College  
B.S. University of California, Los Angeles

**Zeitew, Michael (1997)**

*Lecturer, Mathematics*  
B.S., M.A., M.S., Ph.D. University of California,  
Los Angeles

**Zhao, Hailiang (2004)**

*Lecturer, Chinese*  
B.A. Guangzhou Physical Culture Institute  
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**Zhao, Y. Joy (1996)**

*Professor, English*  
B.A. Hebei University, China  
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**Zucker, Alfred J. (1984)**

*Lecturer, English*  
A.A. Los Angeles Valley College  
A.B., M.A., Ed.D. University of California, Los Angeles  
M.A., M.A. California State University, Long Beach  
M.A. California State University, Los Angeles  
Ph.D. University of Southern California

**Zuidervaat, Genevieve (2004)**

*Lecturer, English*  
B.A., M.F.A. California State University, Long Beach

**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*  
Akins, David A., 1980-2007,  
*Computer Science, 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*  
Back, Leslie W., 1978-2010, *Music*  
Bailey, Nicki, 1969-1994, *Physical Education*  
Baldwin, E. Joan, 1958-1996, *Geology*  
Ball, Janice C., 2000-2010, *Academic Strategies*  
Banda-Ralph, Ruth, 2001-2009, *Counseling*  
Barger, Bill, 1969-1990, *Philosophy*  
Barth, Melinda, 1978-2008, *English*  
Beamon, Seolia F., 1967-1992, *Nursing*  
Beatty, Bruce, 1975-1997, *Economics*  
Beaumont, Ellen, 1963-1993,  
*Physical Education*  
Bilici, Lutchminia, 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*  
Boerger, John A., 1986-2011, *Mathematics*  
Bollinger, Allen E., 1986-2007, *Mathematics*  
Bonanno, Joseph, 1972-2003, *Theatre*  
Boxer, Irwin, 1953-1984, *Mathematics*  
Boyd, Lauralee, 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, Lorene F., 1973-1999, *English*  
Brown, Robert H., 1963-1992,  
*Natural Sciences*  
Buck, Stanley, 1956-1985, *Electronics*  
Campiglia, Jeannette, 1953-1983, *Spanish*  
Carney, John P., 1959-1982, *Political Science*  
Carr, John A., 1981-2007,  
*Computer Aided Design/Drafting*  
Cash, Deanna G., 1969-1996, *Nursing*  
Castagno, Joseph, 1962-1985, *French/Spanish*  
Christian, Leo, 1952-1980, *Dean, Admissions*  
Clarke, Jack, 1978-1993, *Electronics*  
Coad, Raylene, 1974-1987, *Chemistry*  
Cody, Robert, 1965-1998, *Architecture*  
Combs, Jolene S., 1983-2008, *Journalism*  
Conrey, Kathleen, 1976-2001, *Biology*  
Cooper, Willaim, 1984-2009, *Counseling*  
Coughlan, Georgiana F., 1980-2006,  
*English as a Second Language*  
Craft, Bertha, 1966-1983, *Business Education*  
Culton, Paul M., 1990-1997, *Counseling*  
Dallas, Hugo, 1950-1980, *Business Education*  
Davidson, R.Theodore, 1971-1993,  
*Anthropology*  
Davis, George, 1954-1978, *Welding*  
de la Cruz, Rodman, 1966-1992, *Art*  
Despain, Wallis J., 1955-1990,  
*Drafting Technology*  
Dickinson, Richard, 1962-1999, *Psychology*  
Dohi, Ronald E., 1986-2006, *Automotive*  
*Collision Repair/Painting*  
Dominguez, Isbel, 1963-1976, *Cosmetology*  
Donovan, Charles, 1970-1999, *French/Italian*  
Doyle, Marvyl, 1967-1981, *English*  
Drew, C. Irvin, 1987-2010, *Chemistry*  
Duncan, Susan D., 1990-2007,  
*Academic Strategies*  
Dunlap, Woodward, 1950-1981, *Sociology*  
Dunn, Philip, 1958-1982, *Chemistry*  
Durfey, Cline, 1965-1981, *Dean,*  
*Business Education*  
Dutro, Kenneth, 1959-1986,  
*Construction Technology*  
Dzida, Joseph, 1954-1985, *Dean,*  
*Industry and Technology*  
Elmgren, Theodore, 1959-1979, *Associate*  
*Dean, Industry and Technology*

Empringham, Antoinette F., 1974-1995,  
*English*  
Essick, William D., 1949-1982,  
*Physical Education*  
Fasteau, Steven, 1972-2004, *Dean,*  
*Enrollment Services*  
Ferguson, Donald, 1965-1992, *Counseling*  
Fillman, Arthur N., 1954-1981, *Mathematics*  
Finch, Sheila, 1980-2004, *English*  
Fitzpatrick, Bruce, 1963-1997  
*Astronomy/Geology*  
Fordyce, Norman, 1965-1979, *English*  
Fox, Logan, 1963-1988, *Psychology*  
Frenger, Virginia, 1962-1988,  
*Medical Assistant*  
Fridley, Donald R., 1968-1991, *Psychology*  
Fry, Earl J., 1969-1996, *Business*  
Gallucci, Linda G., 1985-2009, *Counseling*  
Garlock, Jerry, 1968-1986, *Dean, Research*  
Gasset, Linda, 1992-2003, *Counseling*  
Georges, Joseph, 1964-2005,  
*Political Science*  
Germain, Stan, 1970-1985, *Counseling*  
Gladson, Carson L., 1973-2007, *Art*  
Glass, Burton S., 1968-1997, *Geology*  
Glomb, William, 1959-1985, *Electronics*  
Goldman, Haskell E., 1955-1988,  
*Mathematics*  
Gong, Jimmie A., 1975-1993, *Cosmetology*  
Gonzalez, Shirley M., 1965-1999, *Nursing*  
Good, Wallace E., 1972-1988, *Dean,*  
*Business*  
Grantham, Harold, 1971-1997,  
*Political Science/History*  
Greenleaf, Al, 1956-1988, *Physical Education*  
Gregory, Daniel, 1976-2004, *Political Science*  
Gross, Diane M., 1981-2007, *Reading*  
Gualtieri, James J., 1956-1981,  
*Business Education*  
Halamka, Dagmar, 1975-2009, *Law*  
Haley, Donald J., 1970-1996, *History*  
Hall, Olive, 1964-1985, *Counseling*  
Halpern, Gisela L., 1989-2009, *Business*  
Hamamoto, Akiko, 1975-1993, *Nursing*  
Harris, Marilyn B., 1979-2002,  
*Office Administration*  
Havrella, Raymond A., 1971-1997,  
*Air Conditioning and Refrigeration*  
Haydu, Donald, 1965-2002, *History*  
Heitmann, Daniel, 1976-2007, *Business*  
Hellwig, Karen, 1972-2007, *Nursing*  
Hemmer, William J., 1988-2005,  
*Mathematics*  
Hershey, Betty, 1947-1977, *Physical Education*  
Hetz, Walter T., 1965-1983, *Physical Education*  
Hiigel, Lewis, 1964-1985, *Dean, Fine Arts*  
Hileman, Jack C., 1950-1982, *Chemistry*  
Hilton, Wayne, 1957-1982, *Electronics*  
Hodges, Hugh T., 1968-1996, *History*  
Holley, William, 1959-1990, *History*  
Hoover, Marlene L., 1980-2006, *Law*  
Horn, Jack, 1976-2004, *Horticulture*  
Houston, R. Daniel, 1974-2010, *English*  
Hufstetler, Nancy, 1969-1990,  
*Nutrition and Foods*  
Hurlburt, Dolores, 1970-2003, *Nursing*  
Husmann, Ann L., 1976-1998,  
*Child Development*  
Imai, Carol K., 1977-2010, *Counseling*  
Irizarry, Arturo, 1989-2001,  
*Dean, Student Services*  
Isbell, Judith H., 1966-1997, *Nursing*  
Jackson, Nathaniel, 1974-1992, *Dean,*  
*Applied Sciences*  
Jacobi, Frank, 1986-2011, *Cosmetology*  
Jama, Stephen, 1963-1995, *English*  
Jenkins, Jean Foster, 1971-1985, *Art*  
Johnson, Alfred M., 1963-1982, *Electronics*  
Jolliff, Richard K., 1968-2001, *Sociology*  
Jones, Edward H., 1956-1983, *Dean,*  
*Humanities*

- Jones, Geoffrey T., 1982-2002, *Computer Science*  
 Jones, Herbert, 1949-1977, *Mathematics*  
 Joslin, Don, 1958-1985, *Physics*  
 Jurk, Donald D., 1956-1992, *Physical Education*  
 Kahan, Walter, 1972-2006, *Electronics and Computer Hardware Technology*  
 Kai, Fred S., 1965-1995, *English*  
 Kalan, Leo, 1960-1983, *Chemistry*  
 Kalil, Carolyn, 1975-2007, *Counseling*  
 Kamm, Paul P., 1964 - 1994, *Law*  
 Kamrath, W.A., 1953-1983, *Journalism*  
 Kappen, William K., 1964-2001, *Physical Education*  
 Kapperman, Richard J., 1968-1999, *Computer Information Systems*  
 Karpel, Geraldine, 1955-1992, *Physics*  
 Kaylor, Don Henry, 1966-1983, *Chemistry*  
 Kennedy, Myron L., 1959-1988, *History*  
 Kessler, Bettylu, 1974-1992, *Food Services*  
 Kettner, Eugene J., 1965-1992, *English*  
 Kinnan, Jerry L., 1970-2000, *Machine Tool Technology*  
 Kludt, Carl B., 1970-1982, *Supervision*  
 Knypstra, Phillip B., 1973-2000, *Accounting*  
 Kobashi, Robert I., 1970-2010, *Art*  
 Kokaska, Sharen, 1988-2005, *Educational Development*  
 LaCoe, Amy, 2000-2007, *Counseling*  
 Landreaux, Paul, 1979-2007, *Physical Education*  
 Lange, Harold M., 1968-1984, *Counseling*  
 Lenham, Jeffrey, 1976-2010, *Educational Development*  
 Leon, Linda, 1973-2005, *Nursing*  
 Leonardo, Leon R. 1981-2011, *Natural Sciences*  
 Levine, Abraham, 1972-1999, *Sociology*  
 Lewis, Jessie, 1956-1976, *Cosmetology*  
 Lilienthal, Nathan, 1966-1995, *Speech*  
 Littles, Betty, 1981-2009, *Reading, English*  
 Lockhart, Charles P., 1969-1995, *Biology*  
 Long, Robert W., 1956-1982, *Chemistry*  
 Lovell, Raymond R., 1977-2008, *Educational Development*  
 Macarary, Lawrence R., 1962-1967, *Art*  
 Mack, James E., 1964-1998, *Music*  
 Maier, Robert O., 1955-1991, *Mathematics*  
 Manahan, Nancy, 1960-1983, *Physical Education*  
 Manly, Myrna F., 1992-2001, *Mathematics*  
 Marshall, Marie Y.S., 1974-1994, *Psychology*  
 Martinelli, John T., 1973-2007, *Business*  
 Mays, Louis, 1955-1985, *Spanish*  
 Mazak, Ruth J., 1947-1980, *Counseling*  
 McCoard, Fern, 1959-1979, *Business*  
 McCrary III, Edward R., 1976-2006, *Psychology*  
 Merzlak, Florence, 1951-1977, *German*  
 Meza, Timothy, 1984-2010, *Construction Technology*  
 Miles, Melvin C., 1971-2003, *English*  
 Miller, Maureen, 1975-2001, *English/Reading*  
 Mills, John M., 1951-1979, *Economics*  
 Mills, Joyce, 1988-1995, *English*  
 Mitchell, Clyde E., 1953-1979, *Mathematics*  
 Montgomery, Stephen E., 1969-2000, *English*  
 Mooney, William T., 1950-1988, *Chemistry*  
 Moore, Melvin W., 1988-2004, *Chemistry*  
 Moran-Wisdom, Olga C., 1979-2004, *Fashion*  
 Moxley, Marion T., 1963-1999, *Political Science*  
 Mracek, Jan, 1963-1981, *Technical Illustration*  
 Muck, Steven, 1964-1997, *Counseling*  
 Myers, Robert, 1966-1994, *Physical Education*  
 Nelson, June Lusk, 1956-2007, *Music*  
 Nelson, Thomas E., 1999-2008, *Physical Education*  
 Niemczycki, Stanley, 1970-2004, *Computer Information Systems*  
 Nothorn, Stephen G., 2000-2007, *Fire and Emergency Technology*  
 O'Brien, Katherine, 1966-1990, *English*  
 Oliver, Richard L., 1955-1982, *Art*  
 Ortell, Edward D., 1970-1991, *Astronomy*  
 Osborne, Arnold, 1987-1999, *Electronics*  
 Owens, Thomas, 1966-2000, *Music*  
 Oyama, Jane Y. 1971-2009, *Biology*  
 Page, Charles M., 1961-2004, *Biology*  
 Palmer, Albert, 1958-1985, *Architecture*  
 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*  
 Phillips, Antoinette, 1981-2007, *Child Development*  
 Pielke, Robert G., 1990-2007, *Philosophy*  
 Pierce, David A., 1970-2004, *Astronomy/Physics*  
 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*  
 Romero, Kathryn, 1988-2011, *Counseling*  
 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*  
 Schauerman, Sam, 1965-1995, *President*  
 Schenk, Joyce, 1986-2005, *English*  
 Schindler, Ambrose, 1947-1983, *Physical Education*  
 Schmitt, Timothy E., 1976-1997, *Computer Aided Design/Drafting*  
 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*  
 Shackelford, Augustus, 1976-2002, *Economics*  
 Shannon, David W., 1979-2005, *Physical Education*  
 Shaw, Lester, 1966-1985, *Business*  
 Shepard, Paul B., 1961-1997, *Philosophy*  
 Silengo, John, 1970-1985, *Photography*  
 Silverman, Cynthia, 2000-2011, *Reading*  
 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*  
 Stewart, Julia A., 1991-2007, *Chemistry*  
 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*  
 Suzuki, Willie, 1960-2000, *Art*  
 Swanson, Herbert, 1961-1979, *Behavioral Science*  
 Talvera, Raymond, 1984-2001, *Counseling*  
 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 Stucken, 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, Stanley F., 1947-1978, *Speech Communication*  
 Wilson, Tom, 1950-1985, *Physics*  
 Wishard, Roy H., 1962-2002, *Biology/Botany/Zoology*  
 Wissman, Frank, 1954-1985, *Administration of Justice*  
 Wood, Ronald, 1970-2001, *Psychology*  
 Woolever, Charles, 1981-1994, *Construction Technology*  
 Wright, Frieda L., 1967-1987, *Nursing*  
 Wrobel, Alfred J., 1956-1997, *History*  
 Yez, Martin, 1954-1985, *Engineering*  
 Young, A. Robert, 1977-2008, *English as a Second Language*  
 Zareski, Susan W., 1969-2008, *Nursing*  
 Zion, Kenneth R., 1982-2010, *Automotive Collision Repair/Painting*  
 Zuck, Richard, 1976-1999, *Chemistry*

# **El Camino College Compton Community Educational Center**



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](http://www.compton.edu)

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## 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 Dean, Student 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 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.

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.

## 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's loss of accreditation, and the ability to offer classes and grant degrees with units that would transfer to other colleges and universities.

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.

### California Residency Definition

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.

### California Residence Waiver

AB 540 allows 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 in defraying the costs of providing these services.

The mandatory general student fee will be assessed at the time of registration. Students who fail to pay this required fee at the time of registration may be subsequently dropped from classes. Grades, transcripts and diplomas will be withheld and future registration restricted. The enrollment fee is \$36 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) 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 through the online system, *MyECC* or in person 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.

El Camino College 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 or citizen of another country is charged an out-of-state fee of \$211 for every credit unit.

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

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

### Non-Resident Tuition Fee Refund

Students will receive a full or partial refund for non-resident tuition if they drop their classes through the online system 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 eight 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 Center identification card. These cards are available in the Student Development Office. The hours are Monday, Tuesday, Thursday, 8:00 a.m. to 4:30 p.m.; Wednesday, 8:00 a.m. to 6:30 p.m. and Friday, 8:00 a.m. to 12:30 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. 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 \$20 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.

### Email Accounts and the Portal

*Students* are required to use their El Camino College assigned email account. This email account is a tool used to communicate with faculty and ECC divisions and for ECC to communicate with students. Student email address is LoginID followed by @mail.eccd.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 kiosks. *MyECC* can be accessed at: [www.compton.edu](http://www.compton.edu); click on *MyECC*.

## How to Reach Us:

310-900-1600  
www.compton.edu

### Academic Affairs Office Telephone Numbers

Academic Affairs	ext. 2130
Academic Programs	ext. 2135
Career & Technical Education	ext. 2273
Health & Human Services	ext. 2702

<b>Student Services</b>	ext. 2023
Admissions and Records Office	ext. 2050
Assessment Center	ext. 2830
Associated Student Body/Student Life	ext. 2802
Athletics	ext. 2949
Bookstore	ext. 2820
Bursar's Office	ext. 2104
CalWORKs	ext. 2072

Compton Center Police:	
Immediate Response	310-660-3100
Front Desk/Non-emergency	310-900-1600 ext. 2999
Child Development Center	ext. 2902
Counseling	ext. 2076
EOP&S/CARE	ext. 2912
Financial Aid/Scholarships	ext. 2935
First Year Experience	ext. 2505
International Students	ext. 2050
Job Placement/Career Center	ext. 2788
Learning Resource Center	ext. 2535
Library	ext. 2175
Special Resource Center	ext. 2402
Student Support Services	ext. 2502
Transfer Center	ext. 2764
Veterans Students	ext. 2050
Welcome Center/Outreach	ext. 2763

## Fees at a Glance (All fees are subject to change)

Enrollment Fee	.....\$36 per unit
Parking Fee - Car	.....\$20 for each semester
Health Fee	.....\$17 for each semester (optional for Compton Center students)
Non-Resident	.....\$211 per unit plus the enrollment fee
F-1 Visa Student Health Insurance	.....\$586 per semester (subject to change)
Auditing	.....\$15 per unit
Credit by Examination	.....\$36 per unit
Transcripts	.....First two free; \$5 for each thereafter; \$8 for emergency
Class Schedule(s)	.....\$1 in Bookstore
College Catalog	.....\$5 in Bookstore, \$7 by U.S. Mail
ASB Activity/Discount Sticker	.....\$10 per semester
Student Representation Fee	......50¢ per semester (required)

**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.**

## 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. Students who complete the admission requirements may check their appointment time on MyECC.

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 are available on the Web and may also be obtained at the Bookstore for a cost of \$1.

### 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 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" or a letter grade.

### 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."

### 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 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 auditing 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 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. The El Camino College Compton 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, located in G-32. 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 El Camino College Compton Center Admissions and Records Office.

**Step 3:** Participate in the new student orientation at the El Camino College Compton Center.

New students must attend an educational planning orientation session or complete the online orientation in order to complete the matriculation process. The My New Student Orientation, intended for students who have not attended college before, will teach you about your educational options and important guidelines for achieving your academic goals.

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

You must follow-up and 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-matriculation 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

Students must provide personal identification with a photograph and their El Camino College Compton Center I.D. to take the assessment test(s) and receive results.

Students must have an application on file prior to any testing. Students should read the catalog description of classes which interest them to determine whether testing is recommended or needed. Placement tests are part of the multiple measures used in the assessment process. **English Placement Test** - Complete the English Placement Test at least one day before attempting to enroll into an English course that has a course level as a prerequisite, co-requisite or recommended preparation. Students may not repeat the English Placement Test once they have enrolled into an English course sequence. A sample test is available for review online or a copy may be obtained from the Assessment/Testing Office.

**English as a Second Language Placement Test** - Complete the English as a Second Language (ESL) Placement Test at least one day before attempting to enroll into any ESL course that 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. Students that require further review of their placement recommendation 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, high school math courses may be used in combination with testing for placement assessment, which must be completed before the student's registration date. Math placement results will be valid for two years. Students may not repeat the Mathematics Placement Test once they have enrolled into a math course 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 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. Students that need further review of their placement recommendation need to obtain the appropriate petition form in the Assessment/Testing Office.

**Mathematics Competency Test** - The Mathematics Competency Test covers intermediate algebra. If passed, the results 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).

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

After receive the test results, a student may request further review of their placement recommendation. 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 MyECC. 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 14)*

### Audit of Courses

*(refer to page 14)*

### Courses Eligible for Credit by Examination

*(refer to page 13)*

### Credit by Examination

Board Policy 4235

*(refer to page 12)*

### Credit for Military Service

*(refer to page 14)*

### F-1 Visa Procedure

*(refer to page 14)*

### Independent Study

Board Policy 4228

*(refer to page 12)*

### Limitation to Remedial Coursework

Board Policy 4115

*(refer to page 18)*

## 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](http://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 (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 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, extension 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](http://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. Rachele 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 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 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 or designee.

## **Student Services**

### **Welcome Center**

The Welcome Center at the 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 students 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 the 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 center maps.

All visitors are encouraged to stop by the Welcome Center to pick up a Compton Center map and information about the academic opportunities and social activities available for students and members of the community.

**For more information on the Welcome Center please call 310-900-1600 extension 2765, outreach@compton.edu or visit Room D-28.**

### **Bookstore Services**

The El Camino College Compton Center Bookstore is located between the Student Life Office and the Cafeteria. The Bookstore is open Monday through Thursday 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 undecided 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. Please call in advance for the daily schedule.

**For more information about Counseling Services, please call 310-900-1600 extension 2076 or visit the office in the Administration Building.**

## **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 Development Center, located in the Ralph C. Dills Vocational Technology Building, assists students in choosing educational and career objectives commensurate with their interest 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 their educational objectives. Services include academic counseling, career/vocational counseling, career exploration/self-assessment materials, and program planning. The center houses a comprehensive career library and offers seminars and workshops on a variety of topics pertaining to personal, professional and Student Development success.

### **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 Center. On a daily basis a variety of full and part-time employment opportunities are available. The Employment Development Specialist provides an effective link between employers

and students who are seeking employment while attending college or career opportunities upon graduation. Additionally, students can access job/internship opportunities through the virtual job placement service link located on the Compton Center web site under "Student Services." Users can click on Career Center/Job Placement Services and browse career and job search engines to research current employment options.

The Job Placement Office conducts weekly pre-employment preparation workshops, personal presentation improvement seminars, resume development assistance, and employer recruitment visits to the campus. The Job Placement Office coordinates an annual Spring Employment/Career Expo where students are introduced to various career options. The Job Placement Office abides by Affirmative Action and Equal Employment Opportunity Guidelines.

**For more information about our Career Center & Job Placement Support Services, please call 310-900-1600 extension 2788 or visit the office in the Vocational Technology Building, first floor, in Room 109.**

## CalWORKs/TANF/GAIN

CalWORKs is the community portion of the California Work Opportunity and Responsibility to Kids Act, which is a welfare reform program established by Assembly Bill (AB) 1542. The program operates as a partnership with the County of Los Angeles, local businesses, and government agencies. CalWORKs funds are for the purpose of assisting single parents who are receiving Temporary Assistance for Needy Families (TANF) and those in transition off welfare to achieve long-term self-sufficiency through coordinated student services. Assistance is provided to eligible students so they can obtain their educational degrees and certificates while earning extra money and gaining valuable work experience that leads to sustainable employment.

### Program Eligibility Criteria:

Major or certificate program in a career field with a good economic forecast as approved by Los Angeles County Department of Public Social Services.

Full-time or part-time student or approved exemption.

Signed contract with El Camino College Compton Center and County of Los Angeles: Proof of eligibility is required each semester.

Participation in required hours of academic and work activity (32 hours weekly).

Class Instruction.

Instructional labs (optional).

Work activity related to major (optional), meaningful part-time employment or community service.

Satisfactory academic progress in classes - good progress toward completion of a degree or certificate.

Services Offered:

**Child Care Assistance:** Referrals are available for students not yet eligible for assistance through Child Care Resource and Referral Agencies in partnership with Los Angeles County.

**County Case Worker:** A County GAIN Worker is on-site; liaisons with GAIN Service Workers from Department of Public Social Services (DPSS) Regions IV, V, and VI are also available.

**Career Counseling:** Assessment is available to help each student choose a career that fits personal interests and abilities.

**Academic Advisement and Assistance:** Educational plans are required and developed for students on an individual basis. The plans are designed to guide the student through each semester of the training program. Tutorial and remedial support is available as needed.

**Work Activity Referral:** The CalWORKs Work Activity Program assists CalWORKs recipients to comply with a combination of 32 hours of academic coursework, work activity, laboratory time, structured internships, or other activities which will lead to

proper preparation for their career. The program is funded through the California Community College State Chancellor's Office and pays for a percentage of the student's wages.

**Individual Employment Plan (IEP):** Students maintain career information, housed in the CalWORKs office, for job placement and documentation including workplace objectives, related training, and letters of recommendation and employment evaluations.

**Employability Skills Training, Clothing Allowance, Transportation and Job Search:** Opportunities are provided through Human Development classes, workshops, and individual guidance by CalWORKs and campus job developers for part-time and permanent placement. Employment is available on and off campus and in coordination with the Financial Aid Office. A clothing allowance for workplace attire and transportation assistance is also provided to eligible students.

**For additional information about our CalWORKs program, please call 310-900-1600, extension 2072 or visit the CalWORKs office.**

## 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, certificate, or transfer to a four-year institution, and be academically disadvantaged. Students are also 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. 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.

### 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. Extenuating 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 on the program, whichever is achieved first. Exceptions are made for students enrolled in majors that require several pre-requisites prior to entering the program.

### COOPERATIVE AGENCIES RESOURCES FOR EDUCATION (CARE)

The CARE program is a state-funded educational program. CARE is a unique program which represents a cooperative effort between the community colleges, Department of Public and Social Services, and the Employment Development Department to assist EOP&S students who are single parents in achieving their educational goals and to break the dependency cycle. In addition to the services received through the EOP&S program, CARE students also receive direct grants, an additional book voucher, child care referrals, workshops of interest to single parents, and CPR/First Aid Training.

To apply for CARE students must be: 1) eligible for EOP&S, 2) a single parent of a child under of fourteen years of age and head of household, 3) currently receiving AFDC/TANF/CalWORKs, 4) full-time upon admission into the program, and 5) enrolled in a program leading to a vocational certificate or license, associate degree or transfer option. To receive the direct grant, you must also apply for federal financial aid and have an unmet financial aid need.

**For more information about the EOP&S and CARE programs, please call 310-900-1600 extension 2912 or visit the office in U-6.**

### First Year Experience (FYE)

Starting a new educational journey can be exciting and overwhelming. Whether you are transitioning from high school or returning after a few years of working, there are so many decisions to make and challenges to face. 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. The following services are provided to students in the First Year Experience Program:

- Early Group Registration
- Orientation
- Learning Community Courses
- Strategies for Success in College
- FYE Faculty
- Field Trips
- Peer Mentors

**For more information about the First Year Experience Program, please call 310-900-1600 extension 2505 or visit the office in D-29.**

### Learning Resources Center (LRC)

The Learning Resource Center provides educational support services for the entire college community. The center strives to provide assistance to both students and instructors in the learning process. Assistance is not limited to any student population or any particular discipline. The activities are designed for instructional support and reinforcement. The following services are provided:

- Tutoring individual and group sessions.
- Study skills workshops - the list of workshops is usually posted.
- Resources - a wide range of software that deals with a variety of subjects is available for use within the LRC for independent study.
- Computer Stations - these are available for Internet access and academic work.

Computer Assisted Instruction (CAI) Lab-Students in developmental classes are required to use this lab that is equipped with computers and software to build up skills that students need for college-level work. It is open to any student who wishes to improve skills in reading, writing, math or science. The CAI Lab is located in Room G-33.

Telecourses. Tapes for television classes are available for viewing in the LRC.

CDs/Tapes are available for some courses.

**The Learning Resource Center is located in Room G-39, and is open the following hours:**

#### Fall and Spring

Monday–Thursday	8:00 a.m. to 8:00 p.m.
Friday	8:00 a.m. to 4:00 p.m.
Saturday	8:00 a.m. to 2:00 p.m.

Check with the Learning Resource Center for Summer Hours.

**For more information about the Learning Resource Center, please call 310-900-1600 extension 2535 or visit the office in Room G-39.**

### Special Resource Center

El Camino College Compton Center is committed to disabled students and their right to an equal educational experience. Students are encouraged to use services as a way to gain equal access and full integration into all aspects of college life. Persons with disabilities that affect one or more major life functions may be eligible for any number of support services provided through the Special Resource Center office.

#### Disabilities Served

El Camino College Compton Center serves students with a variety of disabilities, including, but not limited to:

- Physical or orthopedic
- Visual
- Learning disabilities
- Acquired brain injuries
- Deaf and hearing impaired
- Other disabilities

**Located in Building F, Room 10; some of the services available are:**

- |                                 |                                |
|---------------------------------|--------------------------------|
| Handicapped Parking             | Priority Registration          |
| Special Equipment               | Counseling and Advisement      |
| Note taking and Reader Services | Proctor Service                |
| Tutorial Assistance             | Peer Counseling                |
| Campus Orientation              | Liaison with Faculty and Staff |

**For more information about the Special Resource Center, please call 310-900-1600 extension 2402 or visit Room F-10.**

### Assessment Center

The Assessment Center is located in D-26. 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 badminton, baseball, basketball, cross country, football, track & field, soccer, softball. For more information on our athletics programs, please call 310-900-1600, extension 2949 or visit Building W.

## Transfer Center

Transfer Services are offered Monday, Tuesday, Thursday from 8:00 a.m. to 4:30 p.m., Wednesday 8:00 a.m.- 6:30 p.m. and on Friday from 8:00 a.m. to 12:30 p.m. in D-29. 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 and frequent field trips to an array of major universities. A calendar of 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 Transfer Services.

**For more information about the Transfer Center, please call 310-900-1600 extension 2764 or visit the office in D-29.**

## 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 Admissions and Records office. 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 El Camino College will certify enrollment to the V.A., 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 V.A. 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 V.A. 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 V.A. 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 Writing 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 Writing Center 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 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 Development Office is the focal point for campus activities, student services, student enterprises, and student government. Located in building R-61, the office is open Monday, Tuesday Thursday from 8:00 a.m. to 4:30 p.m.; Wednesdays 8:00 a.m. - 4:30 p.m.; and Fridays from 8:00 a.m. - 12:30 p.m. For more information on the Student Development Office, please call 310-900-1600 ext. 2802.

Services provided by the Student Development Office include, but are not limited, to the following:

1. Student Photo I.D. Cards
2. Campus Information Referrals
3. Student Insurance Claims
4. Student Housing Referral
5. Student Bus Pass Applications
6. Student Gift-Pack Distribution
7. Trust Funds Disbursements
8. Student Lounge

## 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 Development 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, Disabled Students Association, International Students Organization, Latino-American Students Organization, Chess Club, Psychology Club, Psi Beta (National Psychology Honor Society), Salsa Club, and Phi Beta Lambda (Future Business Leaders of America), and Transfer Club

Additional groups can be organized by petitioning student life and the associated student council for authorization to become new clubs on campus.

## Financial Aid

Financial Aid Office  
Room E12, 310-900-1600, ext. 2935

Hours: Please see the current course schedule for any changes

Monday, Tuesday, Thursday: 8:00 a.m.–4:30 p.m.

Wednesday: 8:00 a.m.–6:30 p.m.

Friday: 8:00 a.m.–12:30 p.m.

*Office Hours are subject to change.*

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. Students should go to the Financial Aid Office to apply for financial assistance.

## Financial Assistance

El Camino College Compton 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 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 G-32, phone 310-900-1600, ext. 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:

### Family Size / 2009-2010 Family Income

Family of 1 \$16,245 or less

Family of 2 \$21,855 or less

Family of 3 \$27,465 or less

Family of 4 \$33,075 or less

Family of 5 \$38,685 or less

Family of 6 \$44,295 or less

Family of 7 \$49,905 or less

Family of 8 \$55,515 or less

Add \$5,610 for each additional dependent.

## Academic Standards and Financial Assistance

Students who receive financial assistance required to maintain satisfactory and measurable academic progress. Students must complete the minimum number of units each year that are required for student status, as determined by El Camino College Compton Center, and maintain a minimum grade point average. Progress will be reviewed at least once each academic 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 Web site to clearly understand these standards. 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 in residence at El Camino College Compton Center. For a list of scholarships, information as to their requirements, and application forms and deadlines, please contact the Financial Aid Office.

## 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 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.

**For additional information about Financial Aid, please call 310-900-1600, extension 2935 or visit the Financial Aid Office in Room E-12.**

# 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, 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

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.

### V. HARASSMENT AND THREATENING/VIOLENT BEHAVIOR

a. Causing, 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.

b. Committing sexual harassment as defined by law or by District policies and procedures.

c. 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

*[Italicized Information Indicates El Camino College Compton Center]*

#### 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 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 *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 his or her dean who shall forward this information to the *Dean of Student Services*, or his or her designee. The *Dean of Student Services*, 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 *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. 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 *Dean of Student Services*, or his or her designee, for possible actions described in Section 6 of this procedure.

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 *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. The *Dean of Student Services*, or his or her designee, shall send the notice of suspension to the student, the student file, *Vice President of the Compton Center*, 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 *Dean of Student Services*, 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

*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 actions, that 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, 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, *Dean of Student Services*, *Vice President of Compton Center*, 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 service, at least three (3) days prior to the meeting, of the date, time, and place of the Board of Trustees' meeting. The student may, within forty-eight hours after receipt of the notice, request that the hearing be held as a public meeting. Even if a student has requested that the Board consider an expulsion recommendation in a public meeting, the Board will hold any discussion that might be in conflict with the right to privacy of any student other than the student requesting the public meeting in a closed session.

The Board may accept, modify or reject the findings, decisions and recommendations of the Superintendent/President and/or the hearing panel. If the Board modifies or rejects the decision, the Board shall review the record of the hearing, and shall prepare a new written decision which contains specific factual findings and conclusions. The decision of the Board shall be final. The final action of the Board on the expulsion shall be taken at a public meeting, and the result of the action shall be a public record of the District.

## 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 per-

son 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 *Dean of Student Services*, or his or her designee. The *Dean of Student Services* 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 *Dean of Student Services*, 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 *Dean of Student Services*, 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 *Dean of Student Services*, 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 *Dean of Student Services* 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 *Dean of Student Services*, 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 *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 designated representative 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 if 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.

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.

4. Formal rules of evidence shall not apply. Any relevant evidence shall be admitted.

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 Student Services* or designee 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.

## 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: [www.elcamino.edu/police/CrimePrevention/index.asp](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: [www.elcamino.edu/administration/ir/docs/eccprofile/ECC\\_College\\_CommunityProfiles.pdf](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.

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.



## Administration

### Keith Curry

*Interim Chief Executive Officer,  
Compton Community College District*

### Barbara Perez

*Vice President,  
El Camino College Compton Center*

## Deans/Officers

### Susan Dever

*Dean, Academic Programs*

### Wanda Morris

*Dean, Health and Human Services*

### Rodney Murray

*Dean, Career Technical Education*

### Valerie O'Guynn

*Interim Dean, Student Services*

### Rachelle Sasser

*Dean, Human Resources*

### David Vakil

*Interim Associate Dean, Academic Affairs*

### Daniel Villanueva

*Chief Business Officer*

## Directors/Managers/ Supervisors

### Patricia Bonacic

*Director, CalWORKs, TANF, SRC*

### Robert Butler

*Director, Special Programs and Services*

### Shirley Edwards

*Director, Child Development Center*

### Reuben James III

*Director, Fiscal Affairs*

### Elizabeth Martinez

*Interim Director, EOP&S/CARE*

### Albert Olguin

*Director, Athletics*

### Mytha Pascual

*Director, Financial Aid*

### Rudy Ramos

*Supervisor, Information Services*

### Gerald Sequeira

*Director, Admissions and Records*

### Macheo Shabaka

*Director, TRIO Programs*

### Wayne Ward

*Director, Maintenance and Operations*

### Ricky Shabazz

*Director, Outreach and School Relations  
(Transfer Center)*

### Fred Sturmer

*Director, Facilities Planning*

## Academic Division Chairs

### Eugene Benson

*Career and Technical Education and  
Health Education and Physical Education*

### 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*

### Pamella West

*Health & Human Services*

## Faculty Council Executive Board

### Saul Panski

*Chairperson*

### Estina Pratt

*Vice-Chairperson*

### Christopher Halligan

*Secretary*

## A

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## B

### Benson, Eugene (1981)

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### Bentley, Jr., Walter (1990)

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### Bernaudo, Jose (2004)

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## C

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**D**

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**F**

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**G**

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**H**

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**L**

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**Lazar, Shemiran (1996)**  
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**M**

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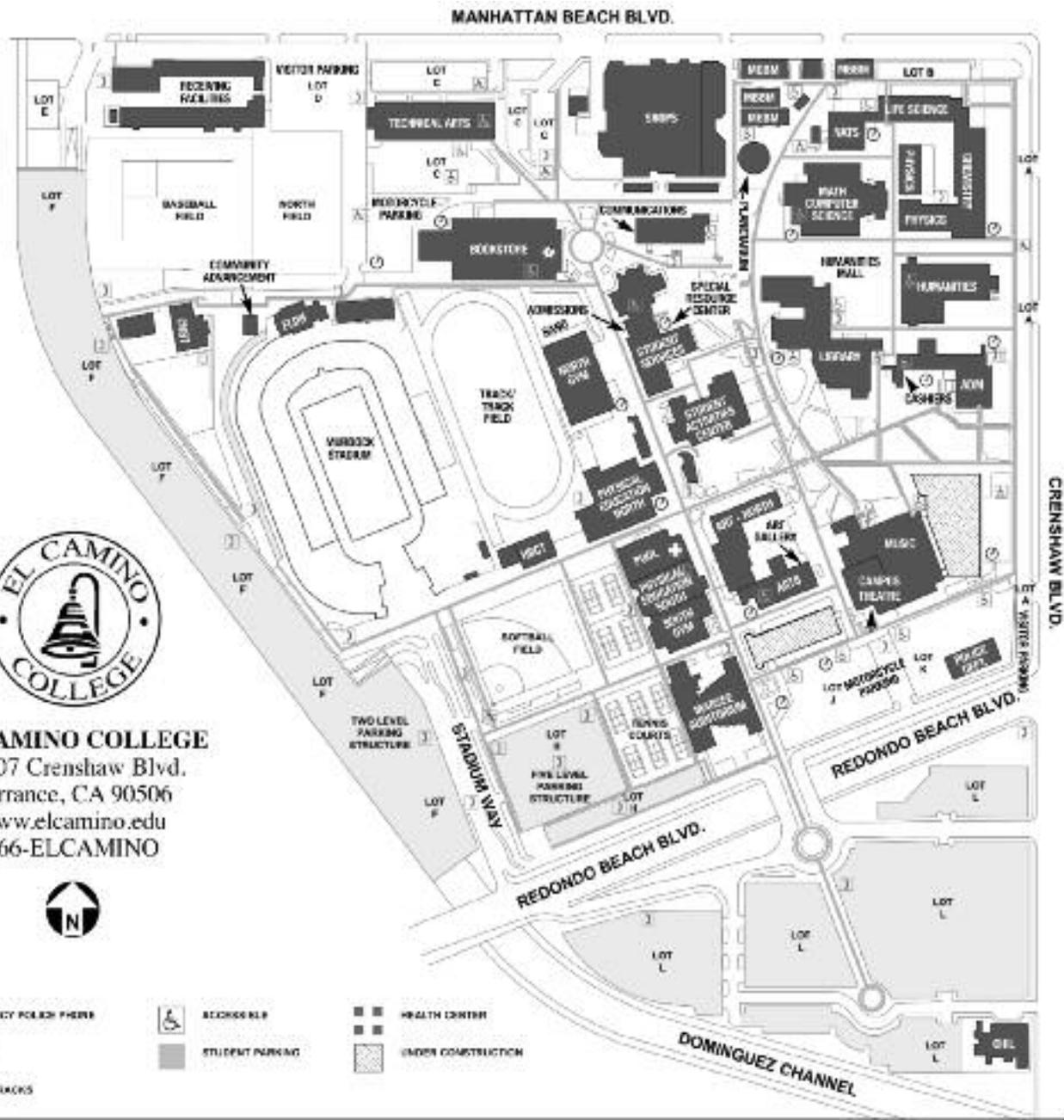
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# EL CAMINO COLLEGE



**EL CAMINO COLLEGE**  
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**KEY:**

- EMERGENCY POLICE HERE
- ACCESSIBLE
- STUDENT PARKING
- BUILDING
- HEALTH CENTER
- UNDER CONSTRUCTION
- BICYCLE RACKS

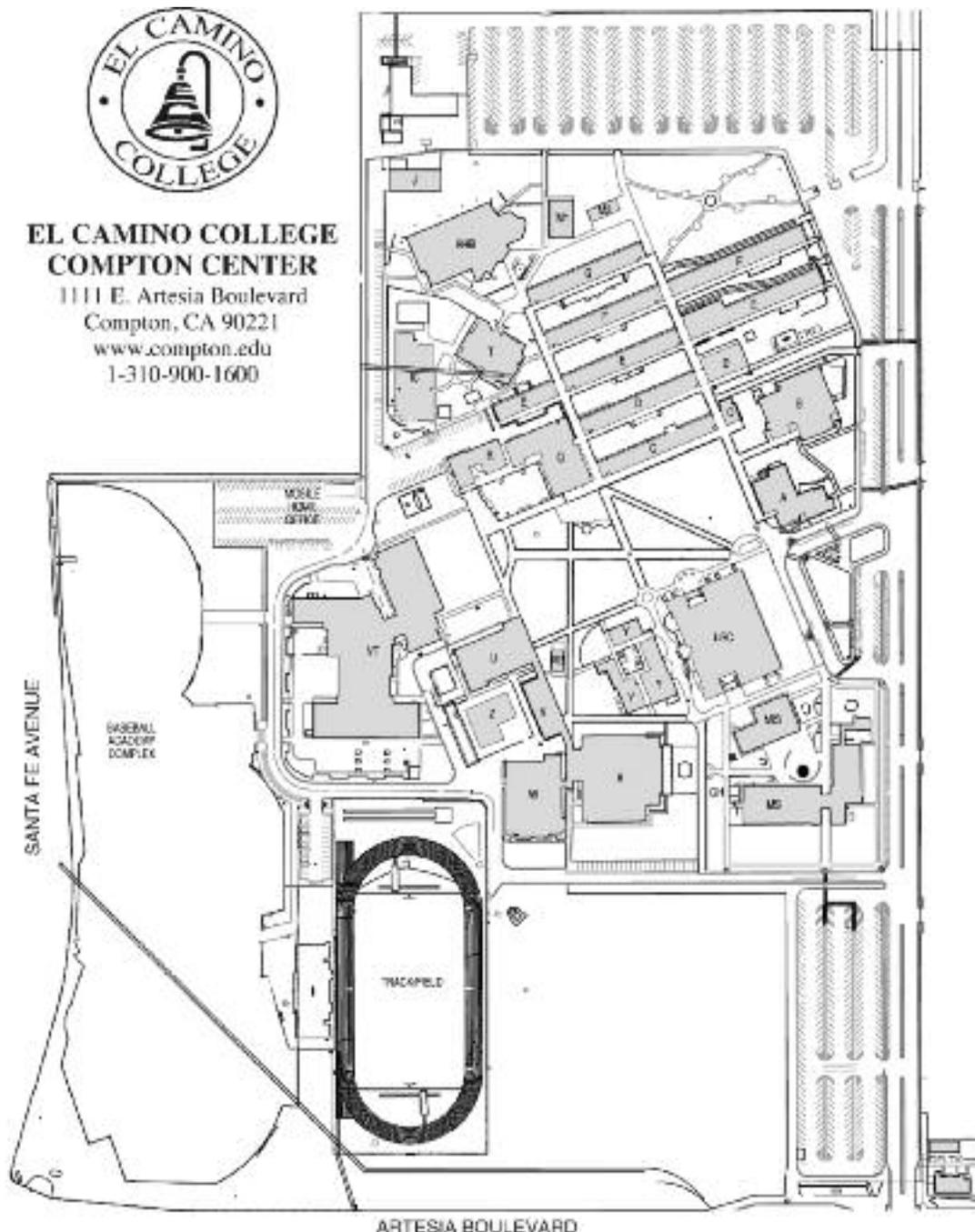
## EL CAMINO COLLEGE

BUILDING / LOCATION	ABBREVIATION	BUILDING / LOCATION	ABBREVIATION
ADMINISTRATION	ADM	MURDOCK STADIUM	STAD
ART AND BEHAVIORAL SCIENCE	ARTB	MUSIC	MUSI
ART BUILDING - NORTH	ARTN	NATURAL SCIENCE	NATS
BASEBALL FIELD	BBFL	NORTH FIELD	NFLD
BOOKSTORE	BKST	NORTH GYM	NGYM
BUSINESS	BUSI	PHYSICAL EDUCATION NORTH	PE-N
POLICE DEPARTMENT	ECPD	PHYSICAL EDUCATION SOUTH	PE-S
CAMPUS THEATRE	TH	PHYSICS	PHYS
CHEMISTRY	CHEM	PLANETARIUM	PLAN
CHERRY TREE OFFICES	CTO	POOL	POOL
CHILD DEVELOPMENT CENTER	CHIL	SAND COURTS	SAND
COMMUNICATIONS	COMM	SHOPS	SHOP
COMMUNITY ADVANCEMENT OFFICE	CADV	SOFTBALL FIELD	SBFL
CONSTRUCTION TECHNOLOGY	CNST	SOCIAL SCIENCE	SOC
FIELDHOUSE	FLDH	SOUTH GYM	SGYM
HANDBALL COURTS	HBCT	SPECIAL RESOURCE CENTER	SRC
HUMANITIES	H	STUDENT ACTIVITIES CENTER	ACTC
SCHAURMAN LIBRARY	LIB	STUDENT SERVICES CENTER	SSVC
LIFE SCIENCE	LS	TECHNICAL ARTS	TECH
MANHATTAN BEACH BLVD. COOLES	MBM	TENNIS COURTS	TENN
MARSEE AUDITORIUM	AUD	TRACK/TRACK FIELD	TRAK/TRFL
MATH / COMPUTER SCIENCE	MCS	YARD	YARD



**EL CAMINO COLLEGE  
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**EL CAMINO COLLEGE COMPTON CENTER**

A	Administration, Admissions & Records, Counseling, Student Services	M5	Math/Science
AHB	Allied Health Building (closed during renovation)	MIS	Management Information Systems
B	Library, Health & Human Services Division, Nursing	M1	ESL/Philosophy
C	Academic Affairs, Business Affairs, Human Resources, Vice President Compton Center	M3	Police Department
D	Welcome Center, Transfer Center, Student Support Services, Outreach & School Relations	Q	Student Lounge, Cafeteria, Faculty & Staff Lounge
DELTA	Foster & Kinship Care Education	R	Bookstore/Student Life
E	Social Science, Family Studies, Ethnic Studies, TV Studio, Digital Photography, Financial Aid	T	Abel B. Sykes, Jr. - Child Development Center
F	Journalism Lab, Language/Writing Lab, Special Resource Center (DSP&S)	TRIO	Talent Search, Upward Bound, Upward Bound Math & Science
G	Spanish, Academic Senate, Assessment Center	U	EOP&S/CARE, Women's Locker Room
IC	Child Development Center - Infant/Toddler Building	V	Classrooms
J	Maintenance	VT	Engineering, Business, CIS, Machine Shop, Diesel, Auto Shop, Welding, CalWorks, Job Placement & Career Center, Print Shop
LRC	Learning Resources Center	W	Physical Education, Athletics, Men's Locker Room
		X	Gymnasium
		Y	Music, Theater Arts
		Z	Swimming Pool



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