



# EL CAMINO COLLEGE

2016-2017 | CATALOG



## **El Camino Community College District A Public Community College**

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

### **Address**

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

### **Telephone Numbers**

1-866-ELCAMINO or 310-532-3670

Admissions: 310-538-5700

Telecommunications for the Deaf: (TDD) 310-660-3445

### **Website**

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

# 2016-2017 Academic Calendar

## Fall Semester - 2016

Fall Semester Classes Begin.....	Saturday.....	August 27, 2016
Weekday Classes Begin.....	Monday.....	August 29, 2016
Last Day to Drop and be Eligible for a Refund (1st 8-Week Session).....	Friday.....	September 2, 2016
Labor Day Holiday (Campus Closed).....	Monday.....	September 5, 2016
First Day to Apply for Degrees and Certificates (Fall).....	Tuesday.....	September 6, 2016
Last Day to Add (Full Semester Courses).....	Friday.....	September 9, 2016
Last Day to Drop and be Eligible for a Refund (Full-Semester).....	Friday.....	September 9, 2016
Last Day to Challenge Residency Status for Current Semester.....	Friday.....	September 9, 2016
Last Day to Drop without Notation on Permanent Record.....	Friday.....	September 9, 2016
Last Day to Apply for Degrees and Certificates (Fall).....	Friday.....	October 14, 2016
Mid-Term Classes Begin.....	Saturday.....	October 22, 2016
Veterans Day Holiday (Campus Closed).....	Friday.....	November 11, 2016
Last Day to Drop with a "W".....	Friday.....	November 18, 2016
Thanksgiving Day Holiday/Weekend (Campus Closed).....	Thurs-Sun.....	November 24-27, 2016
Fall Semester Ends.....	Friday.....	December 16, 2016
Winter Recess (Campus Closed).....	Fri-Mon.....	Dec 23, 2016-Jan 2, 2017

## Winter Session – 2017

First Day to Apply for Degrees and Certificates (Spring).....	Tuesday.....	January 3, 2017
Classes Begin.....	Thursday.....	January 5, 2017
Last Day to Add.....	Tuesday.....	January 10, 2017
Last Day to Drop without Notation on Permanent Record.....	Tuesday.....	January 10, 2017
Last Day to Drop and be Eligible for a Refund.....	Tuesday.....	January 10, 2017
Martin Luther King Holiday (Campus Closed).....	Monday.....	January 16, 2017
Last Day to Drop with a "W".....	Monday.....	January 30, 2017
Winter Session Ends.....	Tuesday.....	February 7, 2017

## Spring Semester – 2017

Lincoln's Day Holiday (Campus Closed).....	Friday.....	February 10, 2017
Spring Semester Classes Begin.....	Saturday.....	February 11, 2017
Weekday Classes Begin.....	Monday.....	February 13, 2017
Last Day to Drop and be Eligible for a Refund (1st 8-Week Session).....	Friday.....	February 17, 2017
Washington's Day Holiday (Campus Closed).....	Monday.....	February 20, 2017
Last Day to Add (Full Semester Courses).....	Friday.....	February 24, 2017
Last Day to Drop and be Eligible for a Refund (Full Semester).....	Friday.....	February 24, 2017
Last Day to Challenge Residency Status for Current Semester.....	Friday.....	February 24, 2017
Last Day to Drop without Notation on Permanent Record.....	Friday.....	February 24, 2017
Last Day to Apply for Degrees and Certificates (Spring).....	Friday.....	March 3, 2017
Spring Recess (Faculty & Students).....	Sat-Fri.....	April 8-14, 2017
Mid-Term Classes Begin.....	Saturday.....	April 15, 2017
Last Day to Drop with a "W".....	Friday.....	May 12, 2017
Memorial Day Holiday (Campus Closed).....	Monday.....	May 29, 2017
ECC Compton Center Commencement.....	Thursday.....	June 8, 2017
El Camino College Commencement.....	Friday.....	June 9, 2017
Spring Semester Ends.....	Friday.....	June 9, 2017

## Summer Sessions – 2017

<b>Six-Week Session Begins.....</b>	<b>Monday.....</b>	<b>June 19, 2017</b>
Last Day to Drop and be Eligible for a Refund.....	Thursday.....	June 22, 2017
Last Day to Add.....	Thursday.....	June 22, 2017
Last Day to Drop without Notation on Permanent Record.....	Thursday.....	June 22, 2017
Active Enrollment Census.....	Monday.....	June 26, 2017
Independence Day Holiday (Campus Closed).....	Tuesday.....	July 4, 2017
Last Day to Drop with a "W".....	Tuesday.....	July 18, 2017
Six-Week Session Ends.....	Thursday.....	July 27, 2017
<b>Eight-Week Session Begins.....</b>	<b>Monday.....</b>	<b>June 19, 2017</b>
Last Day to Drop and be Eligible for a Refund.....	Thursday.....	June 22, 2017
Last Day to Add.....	Monday.....	June 26, 2017
Last Day to Drop without Notation on Permanent Record.....	Monday.....	June 26, 2017
Independence Day Holiday (Campus Closed).....	Tuesday.....	July 4, 2017
Last Day to Drop with a "W".....	Thursday.....	July 27, 2017
Eight-Week Session Ends.....	Thursday.....	August 10, 2017

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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# El Camino College

## Board of Trustees

**Kenneth Brown**  
President

**John Vargas**  
Vice President

**Cliff Numark**  
Secretary

**Mary E. Combs**  
Member

**William Beverly**  
Member

**Nicole Mardesich**  
Student Member

## Accreditation

El Camino College is accredited by the Accrediting Commission for Community and Junior Colleges of the Western Association of Schools and Colleges, 10 Commercial Boulevard, Suite 204, Novato, CA 94949-6175, telephone 415-506-0234, [www.accjc.org](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 Postsecondary Education, California State Department of Education.

## Membership

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

## Certification

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

## ECC Police Department

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

Traffic and parking regulations are posted throughout campus. ECC Police will issue citations to violators of these regulations. All such fines are payable to the Campus Police Department.

## Publisher

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

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

## History

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

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

Located centrally in the South Bay, the El Camino Community College District encompasses five unified and high school districts, 12 elementary school districts and nine cities - a population of nearly 533,000 residents.

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

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

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

In November 2002, voters of the El Camino Community College District approved a \$394 million facilities bond measure. The successful passage of this first-ever bond measure 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.

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

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

## El Camino College Administration, Faculty and Trustees

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

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

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

As the college grew from an enrollment of fewer than 500 in 1946 to 25,000 students today, the curriculum expanded to include not only lower division courses but an honors program and numerous vocational programs. Today, El Camino College students enjoy a broad curriculum featuring 99 degree programs and 83 certificate programs.

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

The college is a reflection of its six presidents. Founding president, Forrest G. Murdock served until his retirement in 1958. He was succeeded by Stuart E. Marsee whose tenure saw 24 years of financial stability, building and growth. Retiring in 1982, he

turned the campus over to Rafael Cortada. Cortada's legacy to the college was the establishment of the Honors Transfer Program and development of the El Camino College Foundation, which raises funds for programs not supported through the general budget. Sam Schauerman, who had served the college first as a dean of instruction, then as vice president of instruction, became El Camino College's fourth president from 1987 to 1995. Thomas M. Fallo became the fifth president in 1995 and served until his retirement in 2016. An alumnus of El Camino College, Fallo supported student success through a million-dollar scholarship program, and by leading the district as it sought and obtained voter approval for two facility land measures totaling \$744 million for safety and technology upgrades. El Camino College today is under the leadership of Dr. Dena P. Maloney, who is guiding the college through the 21st century.

## El Camino College Foundation

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

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

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

## Administration

**SUPERINTENDENT/PRESIDENT**

Dena P. Maloney, Ed.D.

310-660-3593, ext. 3111

**VICE PRESIDENT, HUMAN RESOURCES**

Linda Beam, M.S.

310-660-3593, ext. 3807

**VICE PRESIDENT, ADMINISTRATIVE SERVICES**

Jo Ann Higdon, M.P.A.

310-660-3593, ext. 3107

**VICE PRESIDENT, STUDENT AND COMMUNITY ADVANCEMENT**

Jeanie Nishime, Ed.D.

310-660-3593, ext. 3471

**VICE PRESIDENT, EL CAMINO COLLEGE COMPTON CENTER**

Barbara Perez, M.S.

310-900-1600, ext. 2130

**VICE PRESIDENT, ACADEMIC AFFAIRS**

Jean Shankweiler, Ph.D.

310-660-3593, ext. 3119

**PROVOST, EL CAMINO COLLEGE COMPTON CENTER**

Keith Curry, Ed.D.

310-900-1600, ext. 2023



## Academic Divisions and Programs

### BEHAVIORAL & SOCIAL SCIENCES

Dean  
Division Office -  
Social Science Building, Room 101  
310-660-3735  
Gloria Miranda

Anthropology	Liberal Studies
Child Development	(Elementary Teaching)
Economics	Philosophy
Ethnic Studies	Political Science
General Studies	Psychology
History	Sociology
	Transfer Studies

### BUSINESS

Dean  
Division Office -  
Math, Business, & Allied Health Building, MBA 140  
310-660-3770  
Virginia Rapp

Accounting	Office Administration
Business	Computer Information Systems
Business Administration	Paralegal Studies
Business Management	Real Estate
Marketing	

### FINE ARTS

Dean  
Division Office -  
Music Building, Room 101  
310-660-3715  
Constance Fitzsimons

Associate Dean  
Office - Music Building, Room 101  
Walter Cox

Art	Music
Communication Studies	Photography
Dance	Theatre
Film/Video	

### HEALTH SCIENCES & ATHLETICS

Dean  
Division Office -  
Art/Behavioral Sciences Building, ArtB 101  
310-660-3545  
Rory Natividad

Director, Nursing  
Office - Math, Business, & Allied Health Building,  
Rom 417  
Wanda Morris

Director, Special Resource Center  
Office - Student Services Center, East Wing  
Gary Greco

Director, Athletics and Kinesiology  
Office - Art/Behavioral Sciences Building, ArtB 101  
Colin Preston

Nursing	Respiratory Care
Physical Education	Sign Language/ Interpreter Training
Radiologic Technology	
Recreation	

### HUMANITIES

Dean  
Division Office -  
Humanities Building, Room 322  
310-660-3316  
Thomas Lew

Associate Dean  
Office - Humanities Building, Room 322  
Elise Geraghty

English	Journalism
French	Spanish
Japanese	

### INDUSTRY & TECHNOLOGY

Dean  
Division Office -  
Industry & Technology Education Center, Room 104  
310-660-3600  
Stephanie Rodriguez

Associate Dean  
Office - Industry & Technology Education Center,  
Room 105  
Randal Davis

Administration of Justice	Electronics and Computer Hardware Technology
Air Conditioning and Refrigeration	Engineering Technology
Architecture	Environmental Technology
Automotive Collision Repair/Painting	Fashion
Automotive Technology	Fire and Emergency Technology
Computer Aided Design/Drafting	Machine Tool Technology
Construction Technology	Manufacturing Technology
Cosmetology	Welding

### LIBRARY & LEARNING RESOURCES

Director  
Unit Office - Library, Room 110  
310-660-3525  
Rebecca Russell

Assistant Director  
Office - Library, Room 261  
Sheryl Kunisaki

### MATHEMATICAL SCIENCES

Dean  
Division Office -  
Math, Business & Allied Health Building, MBA130  
310-660-3200  
Jacquelyn Sims

Associate Dean  
Office - Math, Business & Allied Health Building,  
MBA130  
Linda Ternes

Computer Science	Pre-Engineering
Mathematics	

### NATURAL SCIENCES

Dean  
Division Office -  
Life Science Building, Room 101  
310-660-3343  
Amy Grant

Astronomy	General Science
Biology	Geography
Chemistry	Geology
Environmental	Physical Science
Horticulture	Physics

## Mission and Vision

### Mission Statement

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

### Vision Statement

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

### Statement of Values

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

#### People

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

#### Respect

We work in a spirit of cooperation and collaboration.

#### Integrity

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

#### Diversity

We recognize and appreciate our similarities and differences.

#### Excellence

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

### Institutional Effectiveness Outcomes

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

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

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

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

### Strategic Initiatives

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

#### A. Student Learning

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

Objectives:

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

**B. Student Success and Support**

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

Objectives:

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

**C. Collaboration**

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

Objectives:

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

**D. Community Responsiveness**

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

Objectives:

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

**E. Institutional Effectiveness**

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

Objectives:

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

**F. Modernization**

Modernize infrastructure and technological resources to facilitate a positive learning and working environment.

Objectives:

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

## Student Learning Outcomes

### Institutional Learning Outcomes

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

#### El Camino College Institutional Learning Outcomes (ILO):

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

##### ILO 1 – Critical Thinking

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

##### ILO 2 – Communication

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

##### ILO 3 – Community and Personal Development

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

##### ILO 4 – Information Literacy

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



### Student Learning Outcomes and Service Area Outcomes

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

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

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

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

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

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

## Admission Requirements

### Admission

Anyone 18 years of age or older, not prohibited by law, 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 student anyone in grades 11 or 12 who, in the opinion of the college president, may benefit from instruction. These students will be subject to any change in regulations for concurrently enrolled students and all subsequent policies and procedures as adopted by El Camino College. Admission as a special part-time student for anyone in grades 11 or 12 are subject to the requirements and limitations of El Camino College Board Policy 5060 and Administrative Procedure 5011.

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

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

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

### California Residency Definition

A California resident for tuition purposes is defined as a citizen of the United States or a person who holds a status which allows him/her to establish residency in the United States, and can provide evidence of physical presence in the state of California for at least one year prior to the residency determination date, and evidence of intention to make California his/her permanent home. Documented evidence must correspond to dates of physical pres-

ence in California. A non-resident is a person who does not meet the residency requirements of the state of California for tuition purposes or who is a citizen of a foreign country and holds only temporary status in the United States.

### California Residence Waiver

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

### Residence Requirements

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

### Exceptions to Residence Determination

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

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

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

### Appeal Procedure

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

## Concurrent Enrollment of K-12 Students

### Board Policy 5010 and Administrative Procedure 5011

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

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

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

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

Accompanying procedures are available in the Admissions Office.

## F-1 Visa Procedure International Students

El Camino College is approved by U.S. Citizenship and Immigration Services as an institution of higher learning for non immigrant F-1 and M-1 visa students. Prospective students may apply for admission from their homeland by requesting an application packet from the International Student Program (ISP) office. Students attending another school in the United States on an F-1 visa may request a transfer to El Camino College by contacting the International Student Program office. International Students are encouraged to visit the International Student Program web page 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 registering in classes. These orientations are scheduled just before the beginning of the fall and spring semesters. New students should plan to begin their first semester at El Camino College during the fall or spring semester. International students who do not attend the orientation are subject to the loss of privileges.

## International Student Application Procedures

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

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

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

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

## English Proficiency

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

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

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

### **El Camino Language Academy (Intensive English Program)**

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

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



### **Transcripts**

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

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

### **Housing**

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

### **Estimating Expenses**

For the 2016-2017 academic year, approximately \$4,400 is required for tuition, fees, and mandatory medical insurance for each 16-week semester or \$8,800 per academic year.

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

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

## Student Success Support Program

### Student Success Support Program

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

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

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

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

### Steps to Enrollment

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

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

#### Step 2. Prepare and test

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

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

#### Step 3: Participate in New Student Orientation

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

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

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

#### For the non-matriculant student:

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

### Orientation

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

## Assessment/Testing

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

### Assessment Procedures

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

In order to begin this process, you must first apply online and have an El Camino College application on file. Next, complete your placement tests at the Assessment/Testing Center located in Room 217 of the Student Services Center. A photo I.D., such as a driver's license, and 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 registering for courses. Re-testing is limited and may not be done after enrollment into any course related to the test.

### English Placement Test

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

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

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

### English as a Second Language (ESL) Test

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

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

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

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

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

### Mathematics Placement Test

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

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

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

### Chemistry Placement Test

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

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

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

### Mathematics Competency Test

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

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

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

### ATB (Ability-To-Benefit) Test

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

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

### Waiver Exam for Contemporary Health

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

### Educational Planning

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



# Registration for Classes

## Open Enrollment

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

## Email Accounts and the Portal

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

For example: john\_doe@elcamino.edu

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

## Registration Information

### Registration Procedure

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

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

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

### Schedule of Classes

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

### Priority Registration

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

#### Limitations

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

Enrollment may also be limited due to the following:

- A. Health and safety considerations
- B. Facility limitations
- C. Faculty workload
- D. Availability of qualified instructors
- E. Funding limitations
- F. Constraint of regional planning
- G. Legal requirements imposed by statutes, regulations, or contracts

### Registration Priorities

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

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

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

**Priority Level 3** - Eligible students in district designated groups

**Priority Level 4** - Eligible in-district new students

**Priority Level 5** - Eligible continuing students

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

**Priority Level 7** - Other new or returning students

**Priority Level 8** - K-12 concurrently enrolled students

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

**Priority Level 10** - Reinstated dismissed students

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

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

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

### Continuous Enrollment for Priority Registration

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

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

#### Priority Level 1 - Veterans and Foster Youth

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

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

#### Priority Level 3 - District-designated Priority Groups

The students in Tier Three are members of a cohort approved by the El Camino Community College District Board of Trustees to receive priority registration. For the purposes of priority enrollment, these groups shall be treated equally.

#### Priority Level 4 - Eligible In-District New Students

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

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

#### Priority Level 5 - Continuing Students

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

#### Priority Level 6 - Other Eligible New/Returning Students

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

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

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

#### Priority Level 8 - K-12 Concurrently Enrolled Students

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

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

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

**Priority Level 10** - Reinstated from Dismissal

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

**Registration Time Allowance**

1. Scheduled Appointment Time

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

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

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

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

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

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

**Unit Limitations**

The student's program of study will vary according to individual need and objectives. The maximum full-time student program for a semester is 18 units without a physical education class and 19 units with a physical education class. The maximum program of study for summer session is nine units without a physical education class or 10 units if at least one unit is in physical education. The minimum full-time student program is 12 units per semester. A student

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

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

**Full-Time Student**

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

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

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

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

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

**Attendance****Attendance at First Class**

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

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

### Attendance Without Official Enrollment

Students will not be permitted to attend classes in which they are not officially registered. Exceptions may be allowed by the instructor for bona fide visitors. Students who attend a class without proper enrollment (the student did not properly register or add the class) by the published deadline will not be permitted to "late add" the class except for documented extenuating and mitigating circumstances. Students who do not properly register or add a class will receive neither unit or grade credit for that class.

### Attendance During Semester

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

### Adding a Class

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

### Filled and Cancelled Classes

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

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

### Withdrawal from Class

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

### Dropping a Class

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

### Attendance by Non-registered Students

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

### Auditing of Courses

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

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

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

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

### Children in Classrooms

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

## Student Fees/Refunds/Credits

### Enrollment Fee

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

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

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

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

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

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

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

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

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

### Refund of Enrollment/Parking Fees

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

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

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

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

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

### Fee Payment Methods

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

### Health Services Fee

In accordance with the California Education Code, Section 72246, students pay \$19 each semester to cover the operation, supervision, programs and services of the Student Health Center. There are exceptions under these conditions:

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

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

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

## Non-Resident Fee

In addition to the general student fees, an out-of-state United States citizen or citizen of another country is charged a non-resident fee of \$242 for every credit unit (subject to annual change each fall semester). A resident is defined as a citizen of the United States or a person who holds a status which allows him/her to establish residency in the United States, and can provide evidence of physical presence in the state of California for at least one year prior to the residency determination date, and evidence of intention to make California his/her permanent home. Dates on any documentary evidence should correspond to dates of physical presence in California. A non-resident is a person who does not meet the residency requirements of the state of California or who is a citizen of a foreign country and holds only temporary status in the United States. El Camino College maintains a list of exceptions to the non-resident fee requirement. Such a list will be issued by the Admissions Office to each student who is classified as a non-resident.

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

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

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

## Non-Resident Tuition Fee Refund

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

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

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

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

## Parking Fee

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

Students/visitors with disabilities who have been issued a DMV Disabled Person (DP) placard may park in any designated disabled person-parking stall. Disabled persons may park in faculty/staff/student space and MUST DISPLAY the DMV disabled person placard/plates AND a valid El Camino College semester or daily parking permit when parked. Failure to display the DP placard and a valid El Camino College or 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 ECC Police/Parking Services.

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

## Transcript of El Camino College Record

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

## Student Support Services

### ASB Student Discounts & Student Activities Fee

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

The ASB Student Activity Discount Sticker is \$10 each fall and spring semester. Students are charged this fee each semester at the time of enrollment. The ASB Student Activity Discount Sticker is not available for purchase during the summer term; however, the sticker is valid until the start of fall term.

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

### Assessment/Testing Center

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

In addition to English, ESL (Part 1), and Mathematics Placement Tests, the Assessment/Testing Center also administers the following exams: Ability-to-Benefit, Chemistry Placement, Contemporary Health, English as a Second Language (Part 2), and Mathematics Competency. Contact the Assessment/Testing Center for further information or refer to the El Camino College Assessment/Testing web page at [www.elcamino.edu/student-services/assessment-testing/](http://www.elcamino.edu/student-services/assessment-testing/).

### Bookstore Services

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

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

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

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

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

### California Work Opportunity and Responsibility to Kids Act (CalWORKs)

The CalWORKs Program is dedicated to the delivery of a comprehensive program to assist parents with children who are currently receiving Temporary Assistance for Needy Families (TANF) to obtain a vocational certificate, associate degree, or transfer to a four-year university in order to attain sustainable employment to become self-sufficient. The CalWORKs Program provides academic and financial support services including, but not limited to, academic counseling, career advisement, priority registration, textbook assistance, childcare assistance, school supplies, and assistance with the completion of Department of Public Social Services (DPSS) documentation to meet welfare-to-work requirements.

In order to apply for the CalWORKs Program, students and at least one child must be receiving Temporary Assistance for Needy Families (TANF), be enrolled in at least 12 units per semester upon acceptance into the program, and sign a program contract with the College and the Department of Public Social Services (DPSS).

#### CalWORKs Program

Student Services Center, Room 205B

Telephone: (310) 660-6057

Email: [calworksinfo@elcamino.edu](mailto:calworksinfo@elcamino.edu)

## Career Center Services

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

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

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

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

## Cashier's Office

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

## Cooperative Agencies Resources for Education (CARE)

The CARE Program is dedicated to the delivery of a comprehensive program that encourages the enrollment, retention, graduation, and transfer of students who are single heads of household, at least 18 years of age, have at least one child under the age of 14, and receiving Temporary Assistance for Needy Families (TANF). The CARE Program provides academic and financial support services including, but not limited to, academic counseling, grants, book vouchers, transportation assistance, school supplies, and much more.

In order to apply for the CARE Program, students must be eligible for the Extended Opportunity Programs and Services (EOPS) Program, a California resident (including AB540 students), be enrolled in at least 12 units per semester upon acceptance into the program, and submit Temporary Assistance for Needy Families (TANF) certification from the Department of Public Social Services (DPSS).

### CARE Program

Student Services Center, Room 205B

Telephone: (310) 660-6066

Email: [eops@elcamino.edu](mailto:eops@elcamino.edu)

## Counseling Services

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

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

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

## Extended Opportunity Programs and Services (EOPS)

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

In order to apply for the EOPS Program, students must be a California resident (including AB540 students), be enrolled in at least 12 units per semester upon acceptance into the program, be considered educationally disadvantaged as defined by Title 5, taken the English or English as a Second Language (ESL) and mathematics assessment tests, meet the EOPS income criterion, and be eligible for the Board of Governors Fee Waiver (BOGFW).

### EOPS Program

Student Services Center, Room 203

Telephone: (310) 660-3466

Email: [eops@elcamino.edu](mailto:eops@elcamino.edu)

## Financial Aid

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

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

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

1. Apply for financial aid using the Free Application for Federal Student Aid (FAFSA), the renewal FAFSA, or online at [www.FAFSA.ed.gov](http://www.FAFSA.ed.gov).
2. Be a United States citizen, permanent resident, or eligible non-citizen.
3. Be a high school graduate or have completed the GED or passed the High School Proficiency Examination.
4. Be enrolled and in good standing.
5. Maintain Financial Aid Satisfactory Academic Progress.
6. Demonstrate financial need.
7. Be registered with Selective Service if you are a male between 18 and 25 years old and not a current member of the active armed forces.
8. Not be in default on any educational loan and not owe a refund on a grant received for attendance at any post-secondary institution.

### AB540 Students

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

Complete the Dream Act Application at [http://www.csac.ca.gov/dream\\_act.asp](http://www.csac.ca.gov/dream_act.asp)

### Federal Refund Requirements

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

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

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

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

### Cal Grant B

Cal Grant B awards range from \$414 to \$1,656 at community colleges. This grant provides subsistence payments for entering freshmen with no more than one semester full-time or 16 units of part-time coursework completed. The funds may be applied toward living expenses, books, supplies, and transportation.

### Cal Grant B Entitlement Award

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

### Cal Grant C Information

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

### California Chafee Grants

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

### Child Development Grant

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

### Federal Pell Grant

The Federal Pell Grant is a federally funded program that assists students in paying for their education after high school. The Federal Pell Grant awards for full-time students range from approximately \$600 to \$5,815 a year. Federal Pell Grant awards are available only to students who have not received a bachelor's degree.

**Federal Supplemental Educational Opportunity Grant**

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

**Aid for Native Americans**

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

**Federal Work Study**

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

**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 \$46 a unit per semester, based on enrollment status. This is not a cash award to students but is simply a waiver of enrollment fees. Eligible students are not required to pay health fees. To maintain eligibility for the waiver, students must meet academic and progress standards by maintaining a cumulative grade point average (GPA) of 2.0 and must complete more than 50 percent of courses attempted.

**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 \$46 per unit per semester, based on enrollment. This is not a cash award to students, but is simply a waiver of enrollment fees. The Board of Governors reserves the right to change the enrollment fees and the adjusted gross income financial limits every year. Please check with the Financial Aid Office or the Web page for current year information. To maintain eligibility for the waiver, students must meet academic and progress standards by maintaining a cumulative grade point average (GPA) of 2.0 and must complete more than 50 percent of courses attempted.

**Income Criteria Chart - 2016-2017 Academic Year**

Number in Household Family Income 2015 (Including Student) (Adjusted Gross Income or Untaxed Income)

1	\$17,655 or less
2	\$23,895 or less
3	\$30,135 or less
4	\$36,375 or less
5	\$42,615 or less
6	\$48,855 or less
7	\$55,095 or less
8	\$61,335 or less

+ Add \$6,240 for each additional dependent.

You will be asked to provide documentation of income.

**Board of Governors Enrollment Fee Waiver - Method C**

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

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

## Library & Learning Resources

### Library Resources Center (LRC)

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

### The Library Media Technology Center (LMTC)

(Library – East Wing, Basement) is El Camino College's general-use computer lab with over 160 computers. The LMTC has fully networked Windows-based computers, color and laser printing, scanning, adaptive access tools, and Internet access. Software includes word processing, database, spreadsheet, presentation, and graphics programs. Students may also use a variety of software programs for specific disciplines.

### The Basic Skills Study Center

(Library – North Wing, Upper Level) provides individualized computer-assisted instruction in basic reading and math. Students may register for Academic Strategies 1 (AS 1) 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.

### The LRC Tutorial Program

(Library – West Wing, Upper Level) offers free drop-in tutoring for many subjects including, but not limited to, English, ESL, mathematics, chemistry, business, biology, music, and foreign languages. All tutoring, whether located in the LRC or in satellite locations on campus, is provided by trained tutors. The current tutoring schedule is posted in the Learning Center and at: [www.elcamino.edu/Library/lrc/tutoring](http://www.elcamino.edu/Library/lrc/tutoring). Free online tutoring is also available for students when they cannot meet face-to-face with a tutor or a tutor is not available. To register and use this service, go to [www.nettutor.com/ecc](http://www.nettutor.com/ecc).

### The Learning Center

(Library - West Wing, Upper Level) houses a media-materials collection to supplement 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 Monday through Thursday, 8:00 a.m. to 9:00 p.m.; Friday, 8:00 a.m. to 4:30 p.m.; and Saturday, 9:30 a.m. to 2:30 p.m. The 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 per day is charged for overdue circulating books. Overdue Reserve/Textbook Collection materials are charged 25 cents an hour. 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.

## Photo Identification Card

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

## RISE Center

Responsive to the needs of students

Innovative strategies for success

Synergetic and working together through collaboration

Engaging students, faculty and the community

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

## Scholarships

The El Camino College Foundation serves the needs of El Camino College students by providing financial resources to assist with their education. The most direct student support is through scholarships. Thanks to the generous support of individuals, businesses and corporations in our community, El Camino College Foundation awards more than \$1.4 million annually. Current students continuing their education at El Camino College, incoming high school students, and students transferring to four-year colleges and universities are eligible to apply for El Camino College scholarships.

The El Camino College Scholarship online application period coincides with the fall semester – the application deadline is the last day of the fall semester. Students may apply through the *MyECC* Portal at [www.elcamino.edu/student-services/fao/main\\_scholar.asp](http://www.elcamino.edu/student-services/fao/main_scholar.asp) and click the link titled "Scholarship Application." Six graded units and a minimum cumulative GPA of 2.0 are required to apply. Students must complete the online application and submit a faculty letter of recommendation to be eligible. High school students interested in applying for the Foundation's high school scholarships should contact their high school counselors.

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

## Special Resource Center

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

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

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

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

Special classes are available with curriculum designed to provide specialized instruction for various types of disabilities and learning styles. These special classes are listed under Educational Development in the catalog. The Adapted Physical Education Program (APE Program) is available for students who may benefit from physical education offerings with adaptation and personalized instruction. These activity courses are listed within the Physical Education section of the catalog and schedule of classes. For information on special class repetition, refer to "Course Repetition Policy and Active Participatory Course Limitations" located in the Academic Regulations section of this catalog.

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

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

The SRC does not provide assistants for personal use.

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

- Telephone: 310-660-3295; 310-660-3445 TTY; 424-236-6264 Videophone
- Web page: [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 to 7:00 p.m.; and Friday, 8:30 a.m. to noon. HIV Clinic hours are on Tuesday from 1:00 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 CalWORKs/CARE, EOPS, First Year Experience, Outreach, School Relations, and the Assessment/Testing Center are on the second floor. The Information Desk in the foyer, staffed during most hours the building is open, has a variety of information available including campus maps and brochures and other information on courses, special events, and campus activities. Building hours are Monday, Tuesday, and Thursday from 9:00 a.m. to 5:30 p.m.; Wednesday, 9:00 a.m. to 6:30 p.m.; and Friday, 9:00 a.m. to 12:30 p.m.

## Transfer Center

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

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

## Tutorial Services

The Learning Resources Center Tutorial Program located in the Library – West Wing, Upper Level, offers free drop-in tutoring for a variety of subjects. All tutoring is provided by highly trained tutors. Any registered El Camino College student may meet with a tutor on a drop-in basis. Reservations are not required. Students may work with tutors individually or in small groups. Drop-in tutoring for some subjects may be available at other campus locations. Visit the Learning Resources Center's web page for more information at [www.elcamino.edu/library/lrc/tutoring/index.asp](http://www.elcamino.edu/library/lrc/tutoring/index.asp). Free online tutoring is also available for students when they cannot meet face-to-face with a tutor or a tutor is not available. To register and use this service, go to [www.nettutor.com/ecc](http://www.nettutor.com/ecc).



## Veterans Services

Veterans Affairs 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 Services Center, located in the Admissions Office (Student Service Center Room 105A), telephone number 310-660-3486. The Veterans Resource Center can be found in the breezeway between the Student Services Center and the Student Activities Center. 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 Veterans Affairs.

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

Veterans with service disabilities may be eligible for a special vocational rehabilitation program offered by Veterans Affairs. Contact the local VA 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.calvet.ca.gov/](http://www.calvet.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. However, benefits for those participating in the Post-9/11 programs expire 15 years after last discharge or release from active duty. For more information, call the Veterans Affairs 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. The Writing Center offers one-on-one writing conferences with highly qualified tutors, all of whom have a bachelor's or master's degree. In addition, the Writing Center offers tutorials in grammar, documentation, and specialized writing tasks such as college application letters.

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

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

## Student Activities/College Life

### Student Development Office

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

Hours of operation vary; please call 310-660-3593 ext. 3500 for information, or visit [www.elcamino.edu/studentservices/activities/sdo.asp](http://www.elcamino.edu/studentservices/activities/sdo.asp).

### Associated Students Organization

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

### Student Senate

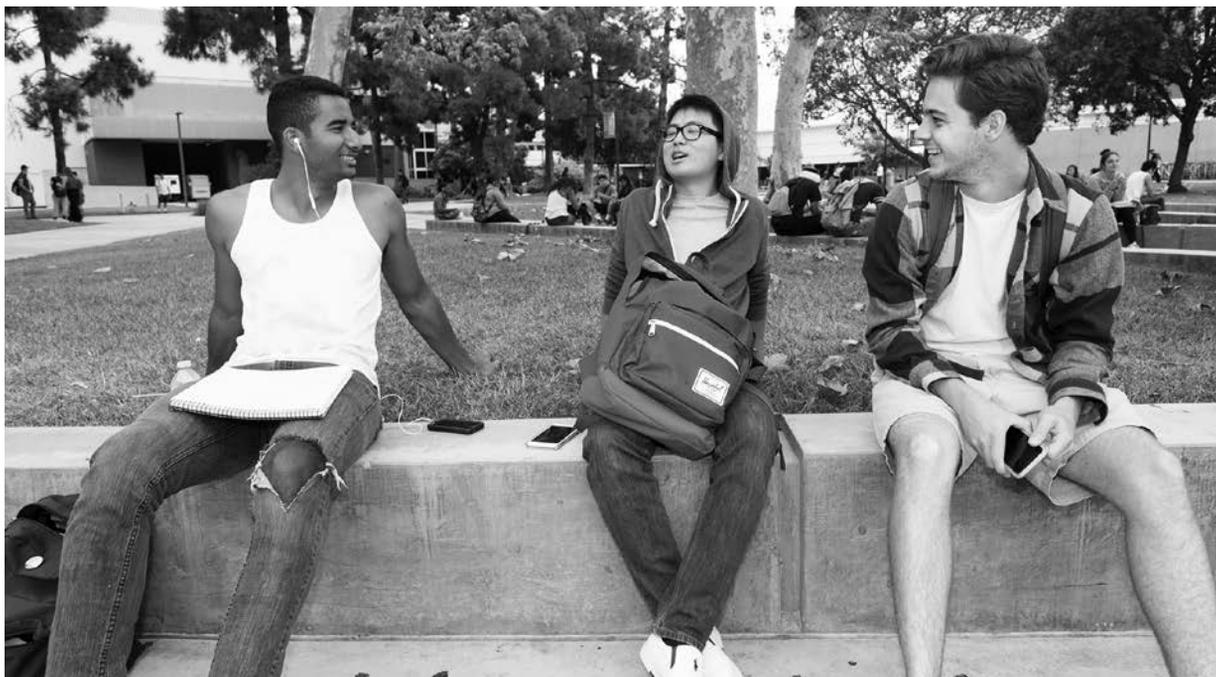
Each of the college's academic divisions is represented on the Student Senate by two elected students. The senate is concerned with the total student body and acts as a point of communication between the academic divisions and students. The Student Development Office advises the membership to sponsor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

### Student Trustee

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

### Inter-Club Council

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



## Students' Rights and Responsibilities

### 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 by 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. Administrative Procedures 5530 Student Rights and Grievances provide detail regarding student due processes. Information is available on the college website at [www.elcamino.edu/administration/board/policies.asp](http://www.elcamino.edu/administration/board/policies.asp).

### 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, Administrative Procedure 5500, and Administrative Procedure 5520.
2. Police citations (e.g., "tickets"). Complaints about citations must be directed to the district's campus police department.
3. Course grades to the extent permitted by Education Code Section 76224(a). Grade appeals 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 Student 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 during which the college is in session and regular classes are held, excluding public holidays and weekends.
6. **Student Grievance Officer:** Appointed by the Superintendent/President or designated representative to assist students in seeking resolution.

#### 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 or designee for inclusion on the panel. A Grievance Hearing Committee shall be constituted in accordance with the following:

It shall include one student, one faculty member, one member of the classified service and one College administrator selected from the panel described above.

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.

The Grievance Officer shall sit with the Grievance Hearing Committee but shall not serve as a member nor vote. The Grievance Officer shall coordinate all scheduling of hearings, shall serve to assist all parties and the Grievance Hearing Committee to facilitate a full, fair and efficient resolution of the grievance, and shall avoid an adversary role.

#### **Informal Resolution:**

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.

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 President or designee in attempting to resolve a grievance informally.

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.

At no time shall any of the persons directly or indirectly involved in the case use the fact of such informal discussion, the fact that a grievance has been filed, or the character of the informal discussion for the purpose of for strengthening the case for or against persons directly involved in the dispute or for any purpose other than the settlement of the grievance.

Any student who believes he/she has a grievance shall file a Statement of Grievance with the Grievance Officer within ten (10) business days of the incident on which the grievance is based, or ten (10) business days after the student learns of the basis for the grievance, whichever is later. The Statement of Grievance must be filed whether or not the student has already initiated efforts at informal resolution, if the student wishes the grievance to become official. Within ten (10) business days following the receipt of the Statement of Grievance Form, the Grievance Officer shall advise the student of his or her rights and responsibilities under these procedures, and assist the student, if necessary, in the final preparation of the Statement of Grievance Form. If at the end of ten (10) business days following the student's first meeting with the Grievance Officer there is no informal resolution of the complaint, which is satisfactory to the student, the student shall have the right to request a grievance hearing.

#### **Formal Resolution (Request for a Grievance Hearing)**

Any request for a grievance hearing shall be filed on a Request for a Student Grievance Hearing Form within ten (10) business days after filing the Statement of Grievance as described above.

Within ten (10) business days following receipt of the request for a grievance hearing, the Superintendent/President or designee shall appoint a Grievance Hearing Committee, as described above. The Grievance Hearing Committee shall meet in private and, without the parties present, select a chair and determine based on the Statement of the Grievance.

The determination of whether the Statement of Grievance presents sufficient grounds for a hearing shall be based on the following:

1. The statement contains facts which, if true, would constitute a grievance under these procedures.
2. The grievant is a student as defined in these procedures, which include applicants and former students.
3. The grievant is personally and directly affected by the alleged grievance.
4. The grievance was filed in a timely manner.
5. The grievance is not clearly frivolous, clearly without foundation, or clearly filed for purposes of harassment.

If the grievance does not meet each of the above requirements, the Grievance Officer shall notify the student in writing of the rejection of the Request for a Grievance Hearing, together with the specific reason(s) for the rejection and the procedures for appeal. This notice will be provided within ten (10) business days of the date the decision is made by the Grievance Hearing Officer.

If the Request for Grievance Hearing satisfies each of the requirements, the College Grievance Officer shall schedule a grievance hearing. The hearing will begin within ten (10) business days following the decision to grant a Grievance Hearing. All parties to the grievance shall be given not less than ten (10) business days' notice of the date, time and place of the hearing.

#### **Hearing Procedure:**

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.

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.

Each party to the grievance may call witnesses and introduce oral and written testimony relevant to the issues of the matter.

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

Unless the Grievance Hearing Committee determines to proceed otherwise, each party to the grievance shall be permitted to make an opening statement. Thereafter, the grievant or grievants shall make the first presentation, followed by the respondent or respondents. The grievant(s) and respondent(s) may present rebuttal evidence after the respondent(s)' evidence is presented. The burden shall be on the grievant or grievants to prove by substantial evidence that the facts alleged are true and that a grievance has been established as specified above.

Each party to the grievance may represent himself/herself, and may have the right to be represented by a person of his/her choice, except that a party shall not be represented by an attorney unless, in the judgment of the Grievance 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 or designee. Any legal adviser 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.

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.

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.

The hearing shall be recorded by the Grievance Officer by either audio recording, and shall be the only recording made. No witness who refuses to be recorded may be permitted to give testimony. The Grievance Hearing Committee Chair at the beginning of the hearing shall ask each person present to identify himself/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.

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.

Within five (5) business days following the close of the hearing, the Grievance Hearing Committee shall prepare and send to the Superintendent/President or designee a written decision. The decision shall include specific factual findings regarding the grievance, and shall include specific conclusions regarding whether a grievance has been established as defined above. The decision shall also include a specific recommendation regarding the relief to be afforded the grievant, if any. The decision shall be based only on the record of the hearing, and not on matters outside of that record. The record consists of the original grievance, any written response, and the oral and written evidence produced at the hearing.

#### **Superintendent/President or Designee Decision:**

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

#### **Appeal:**

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 Superintendent/President or designee within five (5) business days of that decision. The Superintendent/President or designee shall review the Statement of Grievance and Request for a Student Grievance Hearing in accordance with the requirements for a grievance provided in these procedures, but shall not consider any other matters. The Superintendent/President or designee's decision whether or not to grant a grievance hearing shall be final and not subject to further appeal.

#### **Time Limits:**

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

## Student Complaint Procedure for Issues Not Resolved at the Campus Level

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

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

1248 Harwood Road, Bedford, TX 76021-4244), or by phone (817-283-2835), fax (817-354-8519), or email ([tom@coarc.com](mailto:tom@coarc.com)).

7. To the Office of the State Fire Marshal at <http://osfm.fire.ca.gov/> if the complaint involves the Fire and Emergency Technology program and alleges non-compliance with accredited academies standards. The Assistant State Fire Marshal can be contacted by mail (Office of the State Fire Marshal, Assistant Fire Marshal, 1131 S Street, Sacramento, CA), or by phone (916-445-8195). The Office of the State Fire Marshal Accredited Academies Coordinator can be contacted by phone (916-445-4518).

## Policies and Procedures Standards of Student Conduct

### Board Policy 5500

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

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

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

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

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

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

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

**Administrative Procedure 5500**

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

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

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

**Definitions:**

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

**I. DISHONESTY**

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

- d. Using aids such as notes, calculators, or electronic devices unless specifically authorized by the instructor or District personnel.
- e. Handing in the same paper or other assignment in more than one class when prohibited by the instructor.
- f. Any other action which is not an honest reflection of a student's own academic work.
7. Dishonesty, forgery, alteration, or misuse of District documents, records or identification, or knowingly furnishing false information to the District.
8. Unauthorized preparation, giving, selling, transfer, distribution, or publication, for any commercial purpose, of any contemporaneous recording of an academic presentation in a classroom or equivalent site of instruction including, but not limited to, handwritten or typed class notes, still photos, audio, or video recording, except as permitted by any District policy or administrative procedure.

**II. DISRUPTIVE BEHAVIOR, INAPPROPRIATE CONDUCT, AND EXPRESSION**

1. Disruptive behavior, willful disobedience, profanity or vulgarity, or the open defiance of the authority of, or abuse of, District personnel or another person.
2. Causing, attempting to cause, threatening, or acts of aggression including verbal or physical actions that are intended to create fear, apprehension, or bodily harm to another person.
3. Lewd, indecent, or obscene conduct or expression on District-owned facilities or controlled property or at District-sponsored or supervised functions, including public urination or defecation, public sexual acts, taking intimate pictures of another person without consent, disrobing in public, possession and distribution of any obscene material, or viewing pornographic material.
4. Engaging in expression which is obscene, libelous or slanderous, or which so incites others as to create a clear and present danger of the commission of unlawful acts on District-owned facilities or controlled property or at District-sponsored or supervised functions, or the violation of lawful District regulations, or the substantial disruption of the orderly operation of the District.
5. Obstruction or disruption of teaching, research, administration, disciplinary proceedings, or other authorized college activities including, but not limited to, its community service functions or to authorized activities held off-campus.
6. Obstruction or disruption includes, but is not limited to, the use of skateboards, bicycles, radios, and roller skates.
7. Failure to comply with the directions of a member of the District certificated personnel, college management or supervisory personnel, college staff member, or campus police acting within the scope of his or her duties.
8. Conducting, organizing or participating in any activity involving gambling except as permitted by federal and state law.

## III. DRUGS, ALCOHOL, AND SMOKING

1. Unlawful possession, use, sale, offer to sell, or furnishing, or being under the influence of, any controlled substance listed in California Health and Safety Code Sections 11053 et seq., an alcoholic beverage, or an intoxicant of any kind; or unlawful possession of, or offering, arranging or negotiating the sale of any drug paraphernalia, as defined in California Health and Safety Code Section 11014.5 on District-owned facilities or controlled property or at District-sponsored or supervised functions.
2. Willful or persistent smoking (including tobacco and vapor cigarettes) in any area where smoking has been prohibited by law or by regulation of the District.

## IV. THEFT, ROBBERY, AND DAMAGE

1. Committing or attempting to commit robbery or extortion.
2. Causing or attempting to cause damage to District property or to private property on District-owned facilities or controlled property or at District-sponsored or supervised functions.
3. Stealing or attempting to steal District property or private property or knowingly receiving stolen District property or private property on District-owned facilities or controlled property or at District-sponsored or supervised functions.
4. Willful misconduct which results in cutting, defacing, or other injury to any real or personal property owned by the District or personal property of other individuals District-owned facilities or controlled property or at District-sponsored or supervised functions.

## V. SEXUAL MISCONDUCT

1. Committing sexual misconduct including, but not limited to, sexual harassment, domestic violence, dating violence, stalking, sexual assault (non-consensual sexual contact and/or intercourse), sexual exploitation, intimidation, retaliation, and rape as defined by law or by District policies and procedures.
2. Lewd, indecent, or obscene conduct on District-owned or controlled property or at District-sponsored or supervised functions.
3. Other misconduct offenses in violation of the El Camino College Sexual Misconduct Policy.

## VI. HARASSMENT, THREATENING, AND VIOLENT BEHAVIOR

1. Causing, attempting to cause, or threatening to cause physical injury to another person on District-owned facilities or controlled property or at District-sponsored or supervised functions.
2. Engaging in intimidating conduct or bullying against another person through words or actions, including direct physical contact, verbal assaults, such as teasing or name-calling, social isolation or manipulation, and cyber bullying.

3. Willful misconduct which results in injury or death to a student or to college personnel or which results in cutting, defacing, or other injury to any real or personal property on District-owned facilities or controlled property or at District-sponsored or supervised functions.
4. Disruptive behavior, willful disobedience, habitual profanity or vulgarity, or the open and persistent defiance of the authority of, or persistent abuse of, District personnel or another person.
5. Willful misconduct which results in injury or death to another person or which results in cutting, defacing, or other injury to any real or personal property owned by the District or controlled property or at District-sponsored or supervised functions.
6. Other misconduct offenses relative to disability, gender, gender identity, gender expression, nationality, race or ethnicity, religion, sexual orientation, or any other status protected by law including, but not limited to, bullying, discrimination, threatening, or causing abuse (including physical and/or verbal).
7. Violence between those in intimate/dating relationships to each other, and stalking, as defined by law or by District policies and procedures.

## VII. WEAPONS

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

## VIII. MISUSE OF FACILITIES

Unauthorized entry upon or use of District-owned facilities or controlled property or at District-sponsored or supervised functions.

## IX. MISCELLANEOUS

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

## Student Discipline and Due Process Procedure

### Administrative Procedure 5520

Students may review Administrative Procedure 5520 on the El Camino College website:  
[www.elcamino.edu/administration/board/policies.asp](http://www.elcamino.edu/administration/board/policies.asp).

## Access to Records and Release of Information

### Family Educational Rights and Privacy Act of 1974

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

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

### Student Information

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

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

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

## Notice of Non-Discrimination

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

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

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

## Unlawful Discrimination Complaints

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

## Las Quejas por Discriminación Illegal

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

de discriminación ilegal puede ponerse en contacto con y/o presentar una queja con estas oficinas.

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

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

## Sexual and Gender-Based Misconduct

### Including Sexual Assault, Sexual Harassment, and Dating Violence

It is the policy of the El Camino Community College District to provide an education, employment, and business environment free of sexual and gender-based misconduct, including sexual assault, domestic and dating violence, stalking, and sexual harassment such as unwelcome sexual advances, requests for sexual favors, as well as any other unlawful sexual or gender-based verbal or physical conduct or communications as defined and otherwise prohibited by state and federal law. Sexual and gender-based misconduct violates the policy of the District and provisions of the California Fair Employment Act, Education Code and federal rules, regulations and laws prohibiting sexual and gender-based misconduct, including sexual assault, sexual harassment, domestic and dating violence, and stalking. Sexual and gender-based misconduct shall be immediately reported to the District's Title IX Coordinator, or designee, or to any dean, director, or manager for immediate reporting to the Title IX Coordinator. Detailed information, including resources and Title IX procedures, is available in the Office of Staff and Student Diversity, Administration Building, Room 210 and online at [www.elcamino.edu/administration/hr/diversity/misconduct.asp](http://www.elcamino.edu/administration/hr/diversity/misconduct.asp).

## Reporting of Crimes

### Board Policy 3515

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

## 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/](http://www.elcamino.edu/police/). These materials will be distributed annually to all employees and students, and be available upon request to applicants for enrollment or employment.

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



# Academic Regulations

## 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 percent of a class. A student earning a P grade will receive unit credit toward graduation if the course is degree applicable. Unit credit earned in P/NP courses will not be considered when calculating grade point average. Designation of P/NP or option P/NP grading is included in the course description. All grades in credit courses except W and P/NP will be considered in determining the grade point average. While NP and W grades are not used in grade point determination, a student with an excessive number of withdrawals or NPs is subject to probation or dismissal regulations.

##### 2. I-Incomplete

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

##### 3. IP-In Progress

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

##### 4. W-Withdrawal

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

No notation ("W" or other) shall be made on the academic record of the student who withdraws prior to the close of the fourth week of a 16-week class, or 30 percent of a class, whichever is less. Any withdrawal occurring after the published No Notation date shall be recorded as a "W" on the student's record.

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

## 5. MW-Military Withdrawal

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

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

## Grade Change

### Board Policy 4231

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

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

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

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

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

### Grade Change Administrative Procedure 4231

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

## Limitation to Remedial Coursework

### Board Policy 4115

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

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

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

## Prerequisites and Corequisites

### Board Policy 4260

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

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

### Administrative Procedure 4260

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

## Probation, Dismissal and Readmission

### Board Policy 4250

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

#### 1. Placement on Academic Probation

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

#### 2. Removal from Academic Probation

A student will be removed from Academic Probation when the cumulative grade point average is 2.0 or higher in total units attempted at El Camino College.

#### 3. Placement on Progress Probation

A student who has enrolled in 12 or more semester units as shown by the official academic record will be placed on Progress Probation if entries of "W," "I," "NC" and/or "NP" account for 50 percent or more of the total units attempted. Courses dropped prior to the "No Notation" deadline are not considered "units attempted" and do not receive entries as "W" "I," or "NC/NP."

**4. Removal from Progress Probation**

A student will be removed from Progress Probation when the percentage of entries of "W," "I," "NC" and/or "NP" drops below 50 percent of the total units attempted.

**5. Dismissal Because of Academic Probation**

A student on Academic Probation will be dismissed if the student earned a cumulative grade point average of less than 2.0 in all 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. summer) will not be considered a semester. A semester in which the student does not take any courses will not be counted as a semester.

**6. Dismissal Because of Progress Probation**

A student on Progress Probation will be dismissed if the percentage of units in which the student has been enrolled for which entries of "W," "I," "NC" and/or "NP" remains at or above 50 percent for three consecutive semesters. 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 percent.

**Probation, Disqualification and Dismissal****Administrative Procedure 4250**

Students may review the Administrative Procedure for Board Policy 4250 on the El Camino College website [www.elcamino.edu/administration/board/policies.asp](http://www.elcamino.edu/administration/board/policies.asp).

**Academic Renewal Policy and Procedures****Board Policy 4240**

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

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

**Academic Renewal Administrative Procedure 4240**

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

**Academic Freedom****Board Policy 4030**

The El Camino Community College District recognizes that institutions of higher education are conducted for the common good and not to further the interest of either the individual faculty member or the institution as a whole. The common good depends upon the free search for truth and its free exposition. Academic freedom is essential to these purposes and applies to both teaching and research. Academic freedom is fundamental for the protection of the rights of the faculty member in teaching and of the student in learning. It carries with it responsibilities correlative with rights. Accordingly, a faculty member shall have the freedom:

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

- To select or recommend library books, materials, media and online resources representing a multiplicity of philosophies and points of view, relying on professional expertise to maintain appropriate depth and breadth of the collections.

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

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

## Course Repetition

### Board Policy 4225

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

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

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

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

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

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

### Course Repetition

#### Administrative Procedure 4225

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

## Course Repetition Policy and Active Participatory Course Limitations

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

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

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

### Repeatable Courses

Repeatable courses are those listed in the College Catalog that have lowercase letters in the course number. The lowercase letters indicate the number of times a course may be repeated. Examples of repeatable courses include Physical Education 60abc (Women's Intercollegiate Soccer Team) and Communication Studies 23abcd (Forensics – Team Events). In these examples, students may enroll in Physical Education 60abc three times and Communication Studies 23abcd four times.

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

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

### Course Repetition to Alleviate a Substandard Grade

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

A passing or substandard grade received in the retake shall replace the original grade in the calculation of the grade point average, except under circumstances specified in Title 5, Section 55040(b)(6)(8)(9). This will be annotated on the student's academic transcript. The original grade, alleviated by the new grade, must remain on the student's academic transcript. A maximum of two substandard grades will be excluded in computing the student's grade point average (Title 5, Section 55042).

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

### Special Circumstances

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

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

### Active Participatory Course Limitations – Course Families

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

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

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

PHYSICAL EDUCATION PROGRAM COURSE FAMILIES			
<b>Cardiorespiratory Training Family</b>	PE 2 – Walking for Fitness PE 245 – Water Aerobics PE 254 – Aerobic Fitness PE 404 – Adapted Cardiovascular Fitness	<b>Racquet Sports Family</b>	PE 204 – Badminton PE 251 – Tennis
<b>Combatives Family</b>	PE 18 – Boxing PE 220 – Naginata: A Japanese Martial Art PE 221 – Combative Arts and Self Defense	<b>Resistance Training Family</b>	PE 54 – Weight Training PE 259 – Circuit Training PE 401 – Adapted Strength Training
<b>Cross Training Family</b>	PE 3 – Boot Camp Fitness Training PE 10 – Body Conditioning and Physical Fitness PE 400 – Adapted Fitness	<b>Swimming Family</b>	PE 240 – Beginning Swimming PE 241 – Intermediate/Advanced Swimming PE 249 – Swimming for Fitness PE 402 – Adapted Swimming and Hydroexercise
<b>Individual Sport Family</b>	PE 208 – Bowling PE 224 – Golf PE 244 – Springboard Diving PE 407 – Adapted Bowling	<b>Team Sports Family</b>	PE 4 – Basketball PE 7 – Baseball PE 74 – Soccer PE 233 – Pep Squad and Cheer PE 234ab – Pep Squad and Cheer Competition PE 253 – Volleyball PE 255 – Beach Volleyball
<b>Lifeguard Family</b>	PE 247 – Swimming, Lifeguard Training PE 248 – Swimming, Water Safety Instructor	<b>Yoga Family</b>	PE 257 – Yoga for Health and Fitness PE 258 – Power Vinyasa Yoga PE 409 – Adapted Yoga
<b>Outdoor Fitness Adventure Family</b>	PE 47 – Introduction to Indoor Rock Climbing PE 250 – Techniques of Surfboard Riding		
ART PROGRAM COURSE FAMILIES			
<b>Ceramics Family</b>	Art 161 – Beginning Ceramics Art 262 – Intermediate Ceramics Art 263 – Advanced Ceramics	<b>Painting Family</b>	Art 222 – Fundamentals of Painting I Art 223A – Fundamentals of Painting II Art 223B – Fundamentals of Painting III
<b>Drawing Family</b>	Art 110 – Drawing Fundamentals I Art 210 – Drawing Fundamentals II	<b>Printmaking Family</b>	Art 187 – Printmaking I: Etching and Relief Art 288 – Printmaking II: Etching and Relief Art 289 – Lithography Art 290 – Screen Printing
<b>Figure Painting Family</b>	Art 224 – Life Painting I Art 225 – Life Painting II	<b>Sculpture Family</b>	Art 181 – Beginning Sculpture Art 282 – Life Sculpture
<b>Jewelry Family</b>	Art 173 – Introduction to Jewelry and Metalsmithing Art 274 – Jewelry Fabrication Art 275 – Jewelry Casting	<b>Two-Dimensional Design Family</b>	Art 130 – Two-Dimensional Design I Art 230 – Two-Dimensional Design II
<b>Life Drawing Family</b>	Art 217 – Life Drawing I Art 218 – Life Drawing II	<b>Watercolor Family</b>	Art 219 – Watercolor Painting I Art 220 – Watercolor Painting II

<b>DANCE PROGRAM COURSE FAMILIES</b>			
<b>Ballet Family</b>	Dance 120A – Beginning Ballet A Dance 120B – Beginning Ballet B Dance 220A – Intermediate Ballet A Dance 220B – Intermediate Ballet B Dance 221 – Ballet Variations	<b>Social Dance Family</b>	Dance 167 – Social and Ballroom Dance Dance 168 – Latin Social Dance Dance 268 – Intermediate Latin Social Dance
<b>Choreography Family</b>	Dance 171A – Beginning Choreography A Dance 171B – Beginning Choreography B Dance 271A – Intermediate Choreography A Dance 271B – Intermediate Choreography B	<b>Tap Dance Family</b>	Dance 161 – Tap Dance I – Beginning Dance 261 – Tap Dance II – Intermediate
<b>Jazz Dance Family</b>	Dance 140 – Jazz Dance I Dance 240 – Jazz Dance II	<b>World Dance Family</b>	Dance 164 – World Dance Dance 165 – African Dance Dance 265 – Intermediate African Dance
<b>Modern Dance Family</b>	Dance 130A – Beginning Modern Dance A Dance 130B – Beginning Modern Dance B Dance 230A – Intermediate Modern Dance A Dance 230B – Intermediate Modern Dance B		
<b>MUSIC PROGRAM COURSE FAMILIES</b>			
<b>Audition Preparation Family</b>	Music 232 – Advanced Piano Music 290 – Intermediate Applied Music/Individual Lessons	<b>Large Ensemble Family</b>	Music 265abcd – Symphonic Band Music 268abcd – Symphony Orchestra
<b>Beginning Instrument Family</b>	Music 143 – Beginning Woodwind Instruments Music 144 – Beginning Brass Instruments Music 145 – Beginning Percussion Instruments Music 146 – Beginning String Instruments	<b>Piano Family</b>	Music 131A – Beginning Piano I Music 131B – Beginning Piano II Music 231A – Intermediate Piano I Music 231B – Intermediate Piano II
<b>Choral Ensemble Family</b>	Music 151abcd – Mixed Chorus Music 152abcd – Concert Choir Music 253abcd – Chorale Music 257abcd – Women’s Chorus	<b>Small Ensembles Family</b>	Music 260abcd – Woodwind Ensembles Music 261abcd – Brass Ensembles Music 262abcd – Percussion Ensembles Music 263abcd – Clarinet Choir
<b>Guitar Family</b>	Music 147A – Beginning Guitar Music 147B – Beginning Guitar II Music 247 – Intermediate Guitar	<b>Voice Family</b>	Music 120 – Voice Class I Music 220 – Voice Class II Music 221 – Introduction to Lyric Diction for Singers
<b>Jazz Large Ensemble Family</b>	Music 266abcd – Studio Jazz Band Music 267abcd – Concert Jazz Band		
<b>THEATRE PROGRAM COURSE FAMILIES</b>			
<b>Acting Family</b>	Theatre 113 – Introduction to Acting Theatre 114 – Fundamentals of Acting Theatre 214A – Intermediate Acting Theatre 217 – Acting Shakespeare		

## Field Trips and Excursions

### Board Policy 4300

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

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

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

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

### Additional Information

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

## Instructional Materials Fees

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

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

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

For more information on Instructional Materials Fees and the Student Fee Handbook, please visit the Academic Affairs web page [www.elcamino.edu/administration/vpaa/instructional-materials-fee.asp](http://www.elcamino.edu/administration/vpaa/instructional-materials-fee.asp).



## Credit by Examination

### Credit by Examination

#### Board Policy 4235

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

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

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

#### Eligibility Requirements

For eligibility requirements and procedure for earning credit by exam, visit the El Camino College Admissions web page [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp).

#### Restrictions

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

### Courses Eligible for Credit by Examination

#### Business Division

Business 60A  
Business 60B  
Business 60C  
Computer Information Systems 13

#### Health Sciences and Athletics Division

Contemporary Health 1, 3  
First Aid 1  
Physical Education 260  
Radiologic Technology A, 111, 123  
Respiratory Care 170, 172, 174, 176, 178, 280, 282, 284, 286

#### Humanities Division

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

#### Industry and Technology Division

Administration of Justice 100, 103, 107, 111, 115, 126, 130, 131, 170  
Air Conditioning and Refrigeration 5, 6, 21, 23, 25, 27, 30, 34  
Architecture 100, 104, 119, 150A, 158, 170, 172  
Automotive Collision Repair/Painting 1A, 1B, 1C, 1D, 2A, 2B, 2C, 4A, 4B, 4C, 4D, 5A, 5B, 5C, 5D, 6, 20, 22, 24, 26  
Automotive Technology 1, 14, 16, 21, 23, 24, 25, 43, 81  
Computer Aided Design/Drafting 5, 7, 28, 31, 32, 33, 37, 43, 45  
Electronics and Computer Hardware Technology 11, 110, 120, 122, 124, 130, 191  
Engineering Technology 10, 12, 14, 15, 16, 18  
Fashion 10, 11, 15, 20, 27, 28, 31, 35, 41  
Fire and Emergency Technology 1, 2, 3, 4, 5, 6, 9, 10, 11, 19, 20, 144  
Machine Tool Technology 2, 10A, 16, 40, 46, 101  
Manufacturing Technology 70  
Welding 15, 40A, 45

## Alternative Credit Options

### Advanced Placement Tests

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

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

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

#### Art Examination (History of Art):

Art 102A (3 units)  
Art 102B (3 units)

#### Biology Examination:

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 World History):

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 (10 units) - Score of 4 or 5 on Calculus BC Examination

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

#### Physics Examination:

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 specialist in the Admissions Office.

### Acceptance of Credit

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

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

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

### Credit for Military Service

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

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

- 90 days to 1 year: 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.

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

### High School Equivalents

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

High School Course	El Camino College Course
Algebra, first year	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



## EL CAMINO COLLEGE ADVANCED PLACEMENT (AP) CREDIT

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

Course credit and units granted at El Camino College may differ from course credit and units granted by a transfer institution. Please check with the four-year transfer institution's AP credit policies in their catalog or on their website, or consult an El Camino College academic counselor for unit and course credit for major preparation.

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

AP Exam	ECC Associate Degree		CSU		UC	
Type of Exam	ECC GE Area	ECC Course Equivalent for Major Requirements	CSU GE	Units Earned Toward Transfer	IGETC	Units Earned Toward Transfer
Computer Science A		<b>Computer Science 1</b> 4 semester units The student must have a score of 4 or 5	N/A	3 semester units**	N/A	2 quarter/1.3 semester units***
AP CS EXAM LIMITATIONS				<b>**Maximum One exam toward transfer</b>		<b>***Maximum credit 4 quarter/ 2.7 semester units for both CS exams</b>
Economics - Macroeconomics	Social/Behavioral Sciences 3 semester units	<b>Economics 1</b> 3 semester units	Area D2 3 semester units	3 semester units	Area 4	4 quarter/2.7 semester units
Economics - Microeconomics	Social/Behavioral Sciences 3 semester units	<b>Economics 2</b> 3 semester units	Area D2 3 semester units	3 semester units	Area 4	4 quarter/2.7 semester units
English - Language & Composition	Language and Rationality 3 semester units	<b>English 1A</b> Score of 3 or 4 4 semester units <b>English 1A and 1B</b> Score of 5 7 semester units	Area A2 3 semester units	6 semester units	Area 1A	8 quarter/5.3 semester units*
English - Literature & Composition	Language and Rationality or Humanities 3 semester units	<b>English 1A</b> 4 semester units <b>or English 1B</b> 3 units Score of 3 or 4 <b>English 1A and 1B</b> Score of 5 7 units	Area A2 and C2 6 semester units	6 semester units	Area 1A or 3B	8 quarter/5.3 semester units*
AP ENGLISH EXAM LIMITATIONS						<b>*8 quarter/5.3 semester units maximum for both exams</b>
Environmental Science	Natural Sciences 3 semester units	No course equivalency	Area B2 and B3 (if taken prior to Fall 2009) <b>or</b> Area B1 and B3 (regardless of when taken) 4 semester units	4 semester units	Area 5A (with lab)	4 quarter/2.7 semester units
French Language & Culture	Humanities 3 semester units	No course equivalency established; two consecutive semesters	Area C2 3 semester units	6 semester units	Area 3B and 6A	8 quarter/5.3 semester units

Alternative Credit Options

AP Exam	ECC Associate Degree		CSU		UC	
Type of Exam	ECC GE Area	ECC Course Equivalent for Major Requirements	CSU GE	Units Earned Toward Transfer	IGETC	Units Earned Toward Transfer
French Literature	Humanities 3 semester units	No course equivalency established; two consecutive semesters	Area C2 3 semester units (if taken prior to Fall 2009)	6 semester units	Area 3B and 6A	8 quarter/5.3 semester units
German Language & Culture	Humanities 3 semester units	No course equivalency established; two consecutive semesters	Area C2 3 semester units	6 semester units	Area 3B and 6A	8 quarter/5.3 semester units
Government & Politics - Comparative	Social/Behavioral Sciences 3 semester units	Political Science 2 3 semester units	Area D 3 semester units	3 semester units	Area 4	4 quarter/2.7 semester units
Government and Politics - U.S.	Social/Behavioral Sciences 3 semester units	Political Science 1 3 semester units	Area D and US 2* 3 semester units	3 semester units	Area 4	4 quarter/2.7 semester units
AP GOVERNMENT EXAM LIMITATIONS			*Does not fulfill AHI California Government requirement	Student can satisfy the AHI requirement after transfer		
History - European	Social/Behavioral Sciences or Humanities 3 semester units	History 141 3 semester units	Area C2 or D 3 semester units	6 semester units	Area 3B or 4	8 quarter/5.3 semester units
History - U.S.	Social/Behavioral Sciences or Humanities 3 semester units	History 101 and 102 6 semester units	Area C2 or D 3 semester units	6 semester units	Area 3B or 4F	8 quarter/5.3 semester units
History - World	Social/Behavioral Sciences or Humanities 3 semester units	History 140 3 semester units	Area C2 or D6 3 semester units	6 semester units	Area 3B or 4	8 quarter/5.3 semester units
Human Geography	Social/Behavioral Sciences 3 semester units	No course equivalency established	Area D5 3 semester units	3 semester units	Area 4E	4 quarter/2.7 semester units
Italian Language & Culture	Humanities 3 semester units	No course equivalency established; two consecutive semesters	Area C2 3 semester units	6 semester units	Area 3B and 6A 3 semester units	8 quarter/5.3 semester units
Japanese Language & Culture	Humanities 3 semester units	No course equivalency established; two consecutive semesters	Area C2 3 semester units	6 semester units	Area 3B and 6A	8 quarter/5.3 semester units
Latin - Vergil	Humanities 3 semester units	No course equivalency	Area C2 3 semester units	3 semester units	Area 3B and 6A	4 quarter/2.7 semester units
Latin - Literature	Humanities 3 semester units	No course equivalency	Area C2 3 semester units (if taken prior to Fall 2009)	6 semester units	Area 3B and 6A	4 quarter/2.7 semester units

AP Exam	ECC Associate Degree		CSU		UC	
Type of Exam	ECC GE Area	ECC Course Equivalent for Major Requirements	CSU GE	Units Earned Toward Transfer	IGETC	Units Earned Toward Transfer
Music Theory		No course equivalency established			N/A	8 quarter/5.3 semester units
Physics B	Natural Sciences 4 semester units	Physics 2A Score of 5 3 semester units	B1 and B3 4 semester units*	4 semester units*	Area 5A (with lab)	8 quarter/5.3 semester units**
Physics C – Electricity/ Mechanics	Natural Sciences 3 semester units	Physics 1A Score of 5 4 semester units	Area B1 and B3 4 semester units*	4 semester units*	Area 5A (with lab)	4 quarter/2.7 semester units**
Physics C – Electricity/ Magnetism	Natural Sciences 3 semester units	Physics 1A Score of 5 4 semester units	Area B1 and B3 4 semester units*	4 semester units*	Area 5A (with lab)	4 quarter/2.7 semester units**
AP PHYSICS EXAM LIMITATIONS				<b>*Maximum 4 semester units toward GE and 6 semester units toward transfer</b>		<b>**Maximum 8 quarter/5.3 semester units for both exams</b>
Psychology	Social/Behavioral Sciences 3 semester units	Psychology 5 3 semester units	Area D9 3 semester units	3 semester units	Area 4I	4 quarter/2.7 semester units
Spanish Language	Humanities 3 semester units	No course equivalency established; two consecutive semesters	Area C2 3 semester units	6 semester units	Area 3B and 6A	8 quarter/5.3 semester units
Spanish Literature	Humanities 3 semester units	No course equivalency established; two consecutive semesters	Area C2 3 semester units	6 semester units	Area 3B and 6A	8 quarter/5.3 semester units
Statistics	Language and Rationality 3 semester units	Math 150 Score of 4 or 5 4 semester units Score of 3 meets AA/AS math competency requirement	Area B4 3 semester units	3 semester units	Area 2	4 quarter/2.7 semester units

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

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

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

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

## Honors Program

### Alpha Gamma Sigma

Alpha Gamma Sigma (AGS), the Honor and Scholarship Society, is a California Community 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 GPA of 3.0 or above. Students joining directly out of high school are asked to have a minimum GPA of 3.5 at the high school level.

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

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

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

### Dean's List

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

### Honors Transfer Program

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

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

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

#### Honors Admission Requirements

A student must:

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

#### Completion Requirements

A student must:

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

#### Honors Transfer Agreements

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

### Honors Transfer Program Benefits

Benefits include:

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

### Honors Curriculum

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

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

Art 102A - History of Western Art - Prehistoric to Gothic

Art 208H - Honors History of American Art

Astronomy 25 - Stars and Galaxies

Astronomy 20H - Honors The Solar System

Biology 10H - Honors Fundamentals of Biology

Biology 101 - Principles of Biology I

Biology 102 - Principles of Biology II

Business 1A - Financial Accounting

Chemistry 1A - General Chemistry I

Chemistry 4 - Beginning Chemistry

Communication Studies 100 - Public Speaking

Communication Studies 120 - Argumentation and Debate

Communication Studies 130 - Interpersonal Communication

Contemporary Health 1 - Personal and Community Health Issues

Economics 1 - Macroeconomics

English 1AH - Honors Reading and Composition

English 1BH - Honors Literature and Composition

English 1CH - Honors Critical Thinking and Composition

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 112 - Music Cultures of the World

Oceanography 10H - Honors Introduction to Oceanography

Philosophy 101 - Introduction to Philosophy

Philosophy 120 - 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



## Other College Programs

### Cooperative Work Experience Education (Work Experience and Internship Credit)

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

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

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

The following scale reflects the equivalent units for hours worked:

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

#### How to Enroll:

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

#### Cooperative Work Experience Education is offered in the following areas:

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

**Business:** Available in the area of paralegal studies.

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

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

**Humanities:** Available in the area of journalism.

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

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

## Distance Education

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

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



## 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.
2. Have completed at least 12 degree-applicable units at El Camino College with a GPA of 3.0 or higher.
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.
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

Students may review the Administrative Procedure for Board Policy 4228 on the El Camino College website [www.elcamino.edu/administration/board/policies.asp](http://www.elcamino.edu/administration/board/policies.asp).

## Graduation Requirements

### Associate Degree

#### Definition of Associate Degree

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

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

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

#### Philosophy for Associate Degree and General Education

##### Board Policy 4025

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

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

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

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

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

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

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

##### 1. Natural Sciences

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

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

##### 2. Social and Behavioral Sciences

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

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

### 3. Humanities

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

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

### 4. Language and Rationality

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

#### 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.

## Associate Degrees for Transfer

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

## Graduation

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

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

## Evaluation of Completion of Requirements

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

1. Catalog requirement – Degree requirements are derived from the catalog in effect at the time the student entered El Camino College or from the current catalog, following the Catalog Rights guidelines (described below). Each catalog is in effect during the academic year for which it was published (fall semester through the summer session).
2. Residency requirement – Students must complete at least 12 semester units of study in residence within requirements for either the general education and/or major at El Camino College.
3. Unit requirement – Sixty (60) degree applicable units are required for the associate degree, including appropriate general education and major requirements.

4. General Education requirement - Coursework toward the degree must be completed with a cumulative grade point average (GPA) of 2.0 or higher in work at El Camino College and in work completed at all colleges.
5. English requirement - A minimum grade of "C" in a freshman composition course.
6. Mathematics Competency requirement - A minimum grade of "C" is required in this area.
7. Major requirement - A minimum grade of "C" in all courses toward the major.

### Catalog Rights

#### Board Policy 4100.1

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

### Double Major

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

### Second Degree

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

### General Information

Some courses listed in the associate degree requirements may not transfer to a four-year college or university. Please refer to the course notations 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 Associate of Arts or Associate of Science degree patterns that follow.



## Degrees

### Associate of Arts Degree

Administration of Justice\*

Anthropology

Anthropology for Transfer (AA-T)

Art:

- Art History
- Studio Art

Art History for Transfer (AA-T)

Child Development\*

Communication Studies for Transfer (AA-T)

Dance

Economics

Economics for Transfer (AA-T)

Elementary Teacher Education (AA-T)

English

English for Transfer (AA-T)

Ethnic Studies:

- African American Studies
- American Cultures
- Asian American Studies
- Chicano Studies
- Native American Studies

Film/Video\*

French

General Studies

Geography for Transfer (AA-T)

History

History for Transfer (AA-T)

Japanese

Journalism\*

Journalism for Transfer (AA-T)\*

Kinesiology for Transfer (AA-T)

Liberal Studies:

- Elementary Teaching
- Teacher Preparation

Music

Paralegal Studies\*

Philosophy

Philosophy for Transfer (AA-T)

Physical Education

Political Science

Political Science for Transfer (AA-T)

Psychology for Transfer (AA-T)

Real Estate:

- Mortgage Brokerage\*
- Real Estate\*
- Real Estate Appraisal\*

Recreation

Sign Language/Interpreter Training\*

Sociology for Transfer (AA-T)

Spanish

Spanish for Transfer (AA-T)

Studio Arts for Transfer (AA-T)

Theatre

Theatre Arts for Transfer (AA-T)

### Associate of Science Degree

Administration of Justice for Transfer (AS-T)\*

Air Conditioning and Refrigeration\*

Architecture\*

Astronomy

Automotive Collision Repair/Painting\*

Automotive Technology\*

Biology

Business:

- Accounting\*
- Business Administration\*
- Business Management\*
- Marketing\*
- Office Administration - Management\*
- Office Administration - Office Systems\*

Business Administration for Transfer (AS-T)\*

Chemistry

Computer Aided Design/Drafting\*

Computer Information Systems\*

Construction Technology:

- Cabinet and Fine Woodworking\*
- Construction Technology\*

Cosmetology\*

Early Childhood Education for Transfer (AS-T)\*

Electronics and Computer Hardware Technology:

- Computer Technology\*
- Electronics Technology\*

Engineering Technology:

- Engineering Technician\*
- Engineering Technology\*

Environmental Horticulture\*

Fashion:

- Fashion Design and Production\*
- Fashion Merchandising\*

Fire and Emergency Technology:

- Fire and Emergency Technology\*
- Paramedical Technician\*

General Science

Geography

Geology for Transfer (AS-T)

Machine Tool Technology:

- Machinist\*
- Numerical Control Programmer\*

Manufacturing Technology\*

Mathematics

Mathematics for Transfer (AS-T)

Nursing\*

Photography\*

Physical Science

Physics

Physics for Transfer (AS-T)

Pre-Engineering

Pre-Nursing\*

Radiologic Technology\*

Respiratory Care\*

Welding\*

\*Indicates Career and Technical Education (CTE) Program [www.elcamino.edu/academics/cte/](http://www.elcamino.edu/academics/cte/)

## Associate of Arts Degree

### A.A. Degree Requirements

#### Section A - General Education Requirements

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

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

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

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

#### OPTION I: EL CAMINO COLLEGE REQUIREMENTS

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

##### 1. NATURAL SCIENCES:

**minimum 3 semester units**

Anatomy 30, 32  
 Anatomy and Physiology 34A, 34B  
 Anthropology 1, 5  
 Astronomy 12, 20, 20H, 25  
 Biology 8, 10, 10H, 11, 12, 15, 16, 17, 18, 101, 102, 103  
 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, 10H  
 Physical Science 25  
 Physics 1A, 1B, 1C, 1D, 2A, 2B, 3A, 3B, 11, 12  
 Physiology 31  
 Psychology 7

##### 2. SOCIAL AND BEHAVIORAL SCIENCE:

**minimum 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. Philosophy 117  
 Political Science 1, 5, 6, 7
- C. Anthropology 2, 3, 4, 6, 7, 8, 9, 11, 12  
 Business 17, 22  
 Child Development 103, 104  
 Communication Studies 260, 265, 270  
 Economics 1, 2, 5  
 Ethnic Studies 1, 3, 5  
 Film/Video 100  
 Geography 2, 5, 7  
 History 129, 140, 141, 143, 145, 152, 154, 162, 163, 175, 176, 178, 183, 184  
 Journalism 12  
 Philosophy 117  
 Political Science 2, 3, 7, 10  
 Psychology 2, 5, 7, 8, 10, 12, 15, 16, 17  
 Sociology 101, 102, 104, 107, 108, 112

##### 3. HUMANITIES:

**minimum 3 semester units**

Architecture 104  
 Art 101, 102A, 102B, 102C, 106, 109, 150, 205A, 205B, 207, 208, 208H, 209  
 Chinese 1, 2, 3, 24  
 Communication Studies 250  
 Dance 101, 103  
 English 1B, 1BH, 12, 15A, 15B, 20, 21, 27, 28, 30, 31, 34, 35, 36, 39, 40A, 40B, 41B, 42, 43, 44, 48  
 Fashion 31  
 Film/Video 105, 110, 113, 114, 153, 154  
 French 1, 2, 3, 4, 5, 6  
 German 1, 2  
 Humanities 1  
 Italian 1, 2, 24  
 Japanese 1, 2, 3, 4, 25  
 Music 101, 111, 112, 113, 116, 117, 215A, 215B  
 Philosophy 101, 103, 107, 111, 112, 113, 114, 115, 117, 120  
 Photography 150  
 Political Science 7  
 Sign Language/Interpreter Training 111, 112, 113, 114, 115, 130  
 Spanish 1, 2, 3, 4, 5, 6, 52A, 52B  
 Theatre 103, 104, 113

##### 4. LANGUAGE AND RATIONALITY:

**minimum 6 semester units**

One course from A and one course from B:

###### A. English Composition:

**minimum 3 semester units**

Business 27, 28  
 English 1A, 1AH  
 Journalism 1

###### B. Communication and Analytical Thinking:

**minimum 3 semester units**

Business 29  
 Communication Studies 100, 120, 130, 140, 260, 265, 270  
 Computer Information Systems 13, 16, 80  
 Computer Science 1, 14  
 English 1A, 1AH, 1B, 1BH, 1C, 1CH  
 Journalism 12  
 Mathematics 73, 80, 110, 111, 115, 116, 120, 130, 140, 150, 160, 161, 165, 170, 180, 190, 191, 210, 220, 270  
 Philosophy 105, 106  
 Psychology 3, 9A  
 Sociology 109  
 Supervision 27

##### 5. HEALTH AND PHYSICAL EDUCATION:

**minimum 3 semester units**

Contemporary Health 1, 5  
 Human Development 110  
 Nutrition and Foods 11  
 Psychology 2, 16  
 Physical Education 260

**Physical Activity or Fitness Courses:**

Dance 110, 120A, 120B, 130A, 130B, 140, 161, 162, 164, 165, 167, 168, 171A, 220A, 221, 230A, 240, 250, 261, 262, 265, 268, 271A

Physical Education 2, 3, 4, 5abc, 6abc, 7, 10, 15abc, 16abc, 18, 20abc, 21abc, 35abc, 36abc, 45abc, 46abc, 47, 54, 57abc, 58abc, 60abc, 61abc, 65abc, 66abc, 70abc, 71abc, 74, 75abc, 76abc, 80abc, 81abc, 85abc, 86abc, 87abc, 105abc, 106abc, 110abc, 111abc, 115abc, 116abc, 120abc, 121abc, 132abc, 133abc, 135abcd, 140abc, 204, 208, 221, 224, 233, 234ab, 240, 241, 244, 245, 249, 250, 251, 253, 254, 255, 257, 258, 259, 275, 280, 400, 401, 402, 404, 407, 409

(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, 165, 170, 180, 190, 191, 210, 220, 270

Psychology 9A

Sociology 109

**OPTION II: CSU GE BREADTH TRANSFER REQUIREMENTS**

See pages 70-72 of this catalog.

**OPTION III: CSU/UC (IGETC) TRANSFER REQUIREMENTS**

See pages 71-73 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**

Sixty degree applicable units are required for graduation. To qualify for transfer to CSU or UC, electives must be chosen from transferable courses. Students may count only four units of physical education as transfer credit.



## Associate of Science Degree

### A.S. Degree Requirements

#### Section A - General Education Requirements

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

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

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

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

#### OPTION I: EL CAMINO COLLEGE REQUIREMENTS

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

##### 1. NATURAL SCIENCES:

**minimum 3 semester units**

Anatomy 30, 32  
 Anatomy and Physiology 34A, 34B  
 Anthropology 1, 5  
 Astronomy 12, 20, 20H, 25  
 Biology 8, 10, 10H, 11, 12, 15, 16, 17, 18, 101, 102, 103  
 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, 10H  
 Physical Science 25  
 Physics 1A, 1B, 1C, 1D, 2A, 2B, 3A, 3B, 11, 12  
 Physiology 31  
 Psychology 7

##### 2. SOCIAL AND BEHAVIORAL SCIENCE:

**minimum 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. Philosophy 117  
 Political Science 1, 5, 6, 7

C. Anthropology 2, 3, 4, 6, 7, 8, 9, 11, 12  
 Business 17, 22  
 Child Development 103, 104  
 Communication Studies 260, 265, 270  
 Economics 1, 2, 5  
 Ethnic Studies 1, 3, 5  
 Film/Video 100  
 Geography 2, 5, 7  
 History 129, 140, 141, 143, 145, 152, 154, 162, 163, 175, 176, 178, 183, 184  
 Journalism 12  
 Philosophy 117  
 Political Science 2, 3, 7, 10  
 Psychology 2, 5, 7, 8, 10, 12, 15, 16, 17  
 Sociology 101, 102, 104, 107, 108, 112

##### 3. HUMANITIES:

**minimum 3 semester units**

Architecture 104  
 Art 101, 102A, 102B, 102C, 106, 109, 150, 205A, 205B, 207, 208, 208H, 209  
 Chinese 1, 2, 3, 24  
 Communication Studies 250  
 Dance 101, 103  
 English 1B, 1BH, 12, 15A, 15B, 20, 21, 27, 28, 30, 31, 34, 35, 36, 39, 40A, 40B, 41B, 42, 43, 44, 48  
 Fashion 31  
 Film/Video 105, 110, 113, 114, 153, 154  
 French 1, 2, 3, 4, 5, 6  
 German 1, 2  
 Humanities 1  
 Italian 1, 2, 24  
 Japanese 1, 2, 3, 4, 25  
 Music 101, 111, 112, 113, 116, 117, 215A, 215B  
 Philosophy 101, 103, 107, 111, 112, 113, 114, 115, 117, 120  
 Photography 150  
 Political Science 7  
 Sign Language/Interpreter Training 111, 112, 113, 114, 115, 130  
 Spanish 1, 2, 3, 4, 5, 6, 52A, 52B  
 Theatre 103, 104, 113

##### 4. LANGUAGE AND RATIONALITY:

**minimum 6 semester units**

One course from A and one course from B:

A. English Composition:

**minimum 3 semester units**

Business 27, 28  
 English 1A, 1AH  
 Journalism 1

B. Communication and Analytical Thinking:

**minimum 3 semester units**

Business 29  
 Communication Studies 100, 120, 130, 140, 260, 265, 270  
 Computer Information Systems 13, 16, 80  
 Computer Science 1, 14  
 English 1A, 1AH, 1B, 1BH, 1C, 1CH  
 Journalism 12  
 Mathematics 73, 80, 110, 111, 115, 116, 120, 130, 140, 150, 160, 161, 165, 170, 180, 190, 191, 210, 220, 270  
 Philosophy 105, 106  
 Psychology 3, 9A  
 Sociology 109  
 Supervision 27

##### 5. HEALTH AND PHYSICAL EDUCATION:

**minimum 3 semester units**

Contemporary Health 1, 5  
 Human Development 110  
 Nutrition and Foods 11  
 Psychology 2, 16  
 Physical Education 260

**Physical Activity or Fitness Courses:**

Dance 110, 120A, 120B, 130A, 130B, 140, 161, 162, 164, 165, 167, 168, 171A, 220A, 221, 230A, 240, 250, 261, 262, 265, 268, 271A

Physical Education 2, 3, 4, 5abc, 6abc, 7, 10, 15abc, 16abc, 18, 20abc, 21abc, 35abc, 36abc, 45abc, 46abc, 47, 54, 57abc, 58abc, 60abc, 61abc, 65abc, 66abc, 70abc, 71abc, 74, 75abc, 76abc, 80abc, 81abc, 85abc, 86abc, 87abc, 105abc, 106abc, 110abc, 111abc, 115abc, 116abc, 120abc, 121abc, 132abc, 133abc, 135abcd, 140abc, 204, 208, 221, 224, 233, 234ab, 240, 241, 244, 245, 249, 250, 251, 253, 254, 255, 257, 258, 259, 275, 280, 400, 401, 402, 404, 407, 409

(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, 165, 170, 180, 190, 191, 210, 220, 270  
 Psychology 9A  
 Sociology 109

**OPTION II: CSU GE BREADTH TRANSFER REQUIREMENTS**

See pages 70-72 of this catalog.

**OPTION III: CSU/UC (IGETC) TRANSFER REQUIREMENTS**

See pages 71-73 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**

Sixty degree applicable units are required for graduation. To qualify for transfer to CSU or UC, electives must be chosen from transferable courses. Students may count only four units of physical education as transfer credit.



## Certificate 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. 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:  
Administration of Justice  
Forensics

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

Architecture

Art:  
Gallery Management  
Jewelry Design and Fabrication  
Visual Communications (formerly Graphic Design)

Art/Digital Arts:  
Computer Animation  
Digital Photography  
Illustration  
Motion Graphics  
Web Design

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: Office Applications Specialist  
Retail Management

Child Development:

Early Childhood Education  
Early Intervention Assistant  
Special Education Assistant

Computer Aided Design/Drafting

Computer Information Systems:

Computer Systems Applications

Computer Science

Construction Technology:

Construction Technology  
Cabinet and Fine Woodworking

Cosmetology Level II

Electronics and Computer Hardware Technology:

Computer Hardware Electronics Technician  
Electronics Engineering Technician

Engineering Technology:

Engineering Technology  
Engineering Technician

Environmental Horticulture

Fashion:

Fashion Design and Production  
Fashion Merchandising  
Fashion Stylist

Film/Video:

Film/Video Production

Fire and Emergency Technology:

Fire and Emergency Technology  
Fire Academy  
Paramedical Technician

Journalism

Machine Tool Technology:  
 CNC Machine Operator  
 Machinist  
 Numerical Control Programmer

Manufacturing Technology

Music:  
 Commercial Music

Paralegal Studies

Photography

Real Estate:  
 Mortgage Loan Brokerage  
 Real Estate  
 Real Estate Appraisal

Respiratory Care

Sign Language/Interpreter Training

Theatre:  
 Entertainment Lighting Technology

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

Welding



### Certificates of Accomplishment

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  
 Robotics

English as a Second Language

Environmental Technology

Physical Education:  
 Fitness Trainer

Radiologic Technology

Recreation:  
 Recreation Leadership

### 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.

## Articulation/Transfer Patterns

### Preparation for Transfer

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

Admission requirements may change from year to year. It is to the student's advantage to select a transfer institution as early as possible and meet with an academic counselor, transfer center adviser, the university representative, and/or articulation officer for updated information. Students are encouraged to view the ASSIST website at [www.assist.org](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 online. It displays reports of how course credits earned at one California Community College can be applied at the receiving institution. ASSIST is the official repository of articulation for California's public colleges and universities and therefore features the most accurate and up-to-date information available about student transfer in California. For additional information regarding ASSIST, visit the Career and Transfer Center or the ASSIST website at [www.assist.org](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.

### Upper Division Transfer Requirements:

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

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

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

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

### CSU General Education Breadth Requirements

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

### Certification

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

## CSU General Education Requirements

### Area A - Communication in the English Language and Critical Thinking minimum 9 semester units or 12 quarter units

One course from each subsection.

1. Communication Studies 100, 120, 130, 140
2. English 1A, 1AH
3. English 1C, 1CH, Philosophy 105, 106, Psychology 3, Communication Studies 120

### Area B - Physical Universe and its Life Forms minimum 9 semester units or 12 quarter units

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

1. Physical Sciences:
  - 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, 165, 170, 180, 190, 210, 220, 270
  - Psychology 9A
  - Sociology 109

### Area C - Arts, Literature, Philosophy and Foreign Languages minimum 9 semester units or 12 quarter units

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

1. Arts:
  - Architecture 104
  - Art 101, 102A, 102B, 102C, 106, 109, 150, 205A, 205B, 207, 208, 209
  - Communication Studies 250
  - Dance 101, 103
  - Film/Video 110, 154
  - Music 111, 112, 113, 116, 117, 215A, 215B
  - Photography 150
  - Theater 103, 104, 113
2. Humanities:
  - American Studies 7
  - Chinese 1, 2, 3, 24
  - English 1B, 1BH, 12, 15A, 15B, 20, 21, 24A, 25A, 27, 28, 30, 31, 34, 35, 36, 39, 40A, 40B, 41B, 42, 43, 44, 48

- Film/Video 153
- French 1, 2, 3, 4, 5, 6
- German 1, 2
- History 101, 102, 105, 106, 108, 110, 111, 112, 122, 128, 129, 140, 141, 143, 145, 152, 154, 162, 163, 175, 176, 178, 183, 184
- Humanities 1
- Italian 1, 2, 24
- Japanese 1, 2, 3, 4, 25
- Philosophy 101, 103, 107, 111, 112, 113, 114, 115, 117, 120
- Political Science 7
- Sign Language/Interpreter Training 111, 112, 113, 114, 115, 130
- Spanish 1, 2, 3, 4, 5, 6, 52A, 52B

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

Courses must be selected from at least two different subsections.

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

1. Anthropology and Archaeology:
  - Anthropology 2, 3, 4, 6, 7, 8, 9, 11, 12
2. Economics:
  - Economics 1, 2, 5
3. Ethnic Studies:
  - Communication Studies 260
  - Ethnic Studies 1, 3, 5
  - History 108, 110, 111, 112, 122
  - Political Science 5
  - Psychology 10
  - Sociology 107
4. Gender Studies:
  - Anthropology 9
  - History 105, 106
  - Women's Studies 1
5. Geography:
  - Geography 2, 5, 7
6. History:
  - History 101, 102, 105, 106, 108, 110, 111, 112, 122, 128, 129, 140, 141, 143, 145, 152, 154, 162, 163, 175, 176, 178, 183, 184
7. Interdisciplinary Social/Behavioral Science:
  - American Studies 7
  - Business 22
  - Child Development 103
  - Communication Studies 120, 265
  - Journalism 12
  - Sign Language/Interpreter Training 130
8. Political Science, Government and Legal Institutions:
  - Philosophy 117
  - Political Science 1, 2, 3, 5, 6, 7, 10
9. Psychology:
  - Physical Education 275
  - Psychology 2, 5, 8, 9B, 10, 12, 15, 16, 17
10. Sociology and Criminology:
  - Sociology 101, 102, 104, 107, 108, 112

**Area E - Lifelong Understanding and Self-Development**  
**minimum 3 semester units or 4-5 quarter units**

Business 17, 22  
 Child Development 103  
 Contemporary Health 1, 5  
 Human Development 110, 115  
 Nutrition and Foods 11  
 Physical Education 258, 259, 275, 280  
 Psychology 2, 12, 16  
 Sociology 102

One unit may be taken from: Physical Education 10, 2, 3, 4, 7, 47, 54, 57abc, 58abc, 65abc, 66abc, 70abc, 71abc, 74, 80abc, 81abc, 110abc, 111abc, 132abc, 133abc, 140abc, 204, 220, 221, 224, 233, 234ab, 240, 241, 247, 249, 250, 251, 253, 254, 257, 260, 400, 401, 402, 404, 407, 409

*(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

**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.

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

**Intersegmental General Education Transfer Curriculum (IGETC)**

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

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

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

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

**Certification**

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

## IGETC Course Requirements

### Area 1: English Communication

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

Group A: English 1A, 1AH

Group B: One course from: English 1C, 1CH, Philosophy 105, Psychology 3; [The following two - course combinations acceptable if English 1B was taken prior to fall, 1993: English 1B and Philosophy 106 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 100, 120, 130, 140?

### Area 2: Mathematical Concepts and Quantitative Reasoning

One course, 3 semester or 4-5 quarter units:  
Mathematics 1150 #, 120, 130+, 140, 150#, 160#, 161#, 165, 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 101, 102A, 102B, 102C, 106, 109, 150, 205A, 205B, 207, 208, 209&  
Dance 101\$, 103°  
Film/Video 110& 154  
Music 111, 112, 113, 116, 117, 215A, 215B  
Photography 150  
Theatre 103, 104

#### B. Humanities:

American Studies 7  
Chinese 2?, 3, 24  
English 1B+, 1BH, 12+, 15A, 15B, 20, 21, 27, 28, 30, 31, 34, 35, 36, 39, 40A~, 40B~, 41B, 42~, 44, 48  
Film/Video 152, 153  
French 2, 3, 4  
German 2  
History 101, 102, 105, 106, 108, 110, 111, 112, 122, 128, 129, 140, 141, 143, 145, 152, 154, 162, 163, 175, 176, 178, 183, 184  
Humanities 1?  
Italian 24  
Japanese 2, 3, 4, 25  
Philosophy 101, 103, 107, 111, 112, 113, 114, 115, 117, 120  
Political Science 7  
Sign Language Interpreter Training 112?, 113?, 114, 115, 130  
Spanish 2, 3, 4, 52AΣ, 52BΣ

### 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°, 9?, 11?, 12  
Child Development 103&  
Communication Studies 260?, 265?  
Economics 1, 2, 5#  
Ethnic Studies 1?, 3, 5  
Geography 2, 5, 7  
History 101, 102, 105, 106, 108, 110, 111, 112, 122, 128, 129, 140, 141, 143, 145, 152, 154, 162, 163, 175, 176, 178, 183, 184  
Journalism 12  
Philosophy 117  
Political Science 1#, 2, 3, 5, 6±, 7, 10  
Psychology 2, 5, 8, 10~, 12?, 15?, 16Σ, 17  
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

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

**Area 6 UC Only: Language other than English**

The requirement may be met by one of the following: A course at ECC: Chinese 1, French 1, German 1, Italian 1, Japanese 1, Sign Language 111~~≠~~, Spanish 1, 52A, 52B.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**Intersegmental General Education Transfer**

**Curriculum (IGETC):** For general education courses taken after fall 2008, please check with your academic counselor or [www.assist.org](http://www.assist.org) for course applicability and limitations.

## Announcement of Courses

### General Course Information

#### Catalog Course Description

The courses and programs presented on the next pages meet standards approved by the Board of Governors of the California Community Colleges as stated in the California Administrative Code, Title 5, Section 55002. All courses are taught by qualified instructors in accordance with a set of instructional objectives common to all students.

Appearance of a course description in this catalog does not obligate El Camino College to offer the course in any particular semester. For courses offered in a particular term, refer to the Schedule of Classes, that is published every fall, spring, and summer. The Schedule of Classes is available on the web at [www.elcamino.edu/admissions/](http://www.elcamino.edu/admissions/) and may also be obtained at the Bookstore for a nominal fee.

#### Course Numbering

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

Lower case letters after the course number, such as Music 259abcd, indicate the number of semesters the student may enroll in the course. Course sequences with a numerical designation only indicate that the subject be taken in the order beginning with the lowest number. 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.

**Corequisite:** A Corequisite is a course that a student is required to take simultaneously to enroll in another course.

**Recommended Preparation:** Recommended Preparation is a condition of enrollment that a student is advised, but not required, to meet before, or in conjunction with, enrollment in a course or educational program.

**Enrollment Limitation:** An Enrollment Limitation means that a student may be required to meet certain conditions before enrolling in a course. This may apply to such courses as intercollegiate competition courses, public performance courses or honors courses.

A course Prerequisite, Corequisite, Recommended Preparation or Enrollment Limitation is subject to change. Questions regarding the status of the conditions of enrollment for a particular course should be directed to the academic division responsible for the course.

#### Challenging a Prerequisite or Corequisite:

A student has the right to challenge a prerequisite or on the basis of any one, or combination of, these conditions:

1. The prerequisite or corequisite has not been established in accordance with the College's Prerequisite Policy.
2. The prerequisite or corequisite is in violation of Title 5 (California Code of Regulations).
3. The prerequisite or corequisite is unlawfully discriminatory or is applied in an unlawfully discriminatory manner.
4. The student has the knowledge or ability to succeed in the course or program despite not meeting the prerequisite or corequisite.
5. The prerequisite or corequisite course has not been made reasonably available.
6. The student seeks to enroll in a course which involves intercollegiate competition or public performance and if denied admittance, he or she would be delayed by a semester or more in attaining his or her degree or certificate.

7. The student seeks to enroll in a course which has a prerequisite established to protect health and safety, and the student demonstrates that he or she does not pose a threat to himself or herself or to others.

A student should contact either the Counseling Division or the appropriate academic division office to obtain procedures and forms for filing a challenge.

### Course Credit Codes

A "Credit, degree applicable" course is a course which has been designated as appropriate to the associate degree in accordance with the requirements of Title 5, Section 55002.

A "Credit, not degree applicable" course is a college course for which credit is granted but is not applicable to the associate degree.

A "Noncredit course" meets particular needs of a student but carries no college credit.

### Course Transferability

The course transferability notation indicates if the course is transferable to the CSU and/or UC systems. For example, "Transfer CSU, UC" means a course is acceptable for admission eligibility purposes as a general education requirement or major requirement or for elective credit by the California State University and the University of California systems. If followed by an asterisk (UC\*), there is a unit limitation on transferability. For details, see a counselor, the Transfer Center or the Articulation Officer. Students planning to transfer to a college or university should consult the transfer guide sheets available in Counseling Services, visit the Transfer Center, or view [www.assist.org](http://www.assist.org).

El Camino College has arranged transferability of courses through articulation agreements with various private colleges and universities. For details, see a counselor, the Transfer Center or the Articulation Officer.



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## Academic Strategies

### Academic Strategies 1

(formerly Academic Strategies 1abcd)

#### *Individualized Academic Strategies*

1 unit; 3 hours lab per week to be arranged

This laboratory course emphasizes self-paced individualized instruction based on computerized diagnoses of difficulties in reading and/or mathematical computation. After diagnoses, individualized instructor-led and computer-based interventions are offered to improve reading or math skills.

*Note: Pass/no pass only.*

### Academic Strategies 20

(formerly Academic Strategies 20ab)

#### *Prewriting Workshop*

2 units; 2 hours lecture

*Credit, not degree applicable*

In this course, students will learn strategies to increase their understanding and use of prewriting and planning techniques, which are important first steps in successfully completing college writing assignments.

*Note: Pass/no pass only.*

### Academic Strategies 22

(formerly 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 23

(formerly Academic Strategies 23ab)

#### *Spelling Techniques*

2 units; 2 hours lecture

*Credit, not degree applicable*

This course is designed to help students identify and correct common spelling errors and to provide practice using the appropriate rules of spelling necessary for college-level writing.

*Note: Pass/no pass only.*

### Academic Strategies 25

(formerly 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 30

(formerly Academic Strategies 30ab)

#### *Test-Taking Strategies*

2 units; 2 hours lecture

*Credit, not degree applicable*

In this course, students examine how testing instruments (such as true/false, multiple choice, and essay questions) are structured. Students learn techniques designed to increase success on various types of achievement tests.

*Note: Pass/no pass only.*

### Academic Strategies 33

(formerly 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 35

(formerly 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 36

(formerly 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 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.

## Accounting See Business

## ADMINISTRATION OF JUSTICE

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

#### 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.

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

Course	Title
<b>Required Core: 21 units</b>	
AJ 100	Introduction to Administration of Justice (3)
AJ 103	Concepts of Criminal Law I (3)
AJ 115	Community and Human Relations (3)
AJ 130	Criminal Procedures (3)
AJ 131	Legal Aspects of Evidence (3)
AJ 135	Report Writing (3)
AJ 170	Laws of Arrest, Search and Seizure (3)
<b>6-11 units from:</b>	
AJ 95	Cooperative Work Experience Education (2-4)
AJ 106	Criminal Justice Recruitment and Selection (3)
AJ 107	Crime and Control – An Introduction to Corrections (3)
AJ 109	Introduction to Police Patrol Procedures (3)
AJ 111	Criminal Investigation (3)
AJ 126	Juvenile Delinquency and Legal Procedures (3)
AJ 132	Forensic Crime Scene Investigation (3)
AJ 133	Fingerprint Classification and Investigation (3)
AJ 134	Introduction to Crime Analysis (3)
AJ 150	Peace Officer Training Module – Level III (7)
<b>Total Units: 27-32</b>	

#### Preparation for the Administration of Justice Transfer Major

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

#### Certificates of Achievement

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

#### Administration of Justice Certificate of Achievement

Course	Title
<b>Required Core: 21 units</b>	
AJ 100	Introduction to Administration of Justice (3)
AJ 103	Concepts of Criminal Law I (3)
AJ 115	Community and Human Relations (3)
AJ 130	Criminal Procedures (3)
AJ 131	Legal Aspects of Evidence (3)
AJ 135	Report Writing (3)
AJ 170	Laws of Arrest, Search and Seizure (3)
<b>6-11 units from:</b>	
AJ 95	Cooperative Work Experience Education (2-4)
AJ 106	Criminal Justice Recruitment and Selection (3)
AJ 107	Crime and Control – An Introduction to Corrections (3)
AJ 109	Introduction to Police Patrol Procedures (3)
AJ 111	Criminal Investigation (3)
AJ 126	Juvenile Delinquency and Legal Procedures (3)
AJ 132	Forensic Crime Scene Investigation (3)
AJ 133	Fingerprint Classification and Investigation (3)
AJ 134	Introduction to Crime Analysis (3)
AJ 150	Peace Officer Training Module – Level III (7)
<b>Total Units: 27-32</b>	

#### Forensics Certificate of Achievement

Course	Title
AJ 111	Criminal Investigation (3)
AJ 132	Forensic Crime Scene Investigation (3)
AJ 133	Fingerprint Classification and Investigation (3)
AJ 134	Introduction to Crime Analysis (3)
AJ 135	Report Writing (3)
ART 110	Drawing Fundamentals I (3)
PHOT 101	Elementary Photography (2)
<b>Total Units: 20</b>	

For Gainful Employment program information, please visit [www.elcamino.edu/academics/indtech/adminjustice](http://www.elcamino.edu/academics/indtech/adminjustice).

## ADMINISTRATION OF JUSTICE

### AS-T Degree

#### *Industry and Technology Division*

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

The administration of justice program provides students with the ability to apply principles of the justice system, constitutional and procedural considerations affecting arrest, search and seizure, human relations, and concepts of criminal law as well as demonstrate proficiency in report writing and record keeping. Students completing this program will be prepared to transfer and major in criminal justice. Competencies will be assessed regularly in accordance with the California Commission on Peace Officers Standards and Training (P.O.S.T.) criteria.

The Associate in Science for Transfer (AS-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AS-T are guaranteed admission to the CSU system, but not to a particular campus or major. In order to earn an AS-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AS-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AS-T.

#### **Course Title**

##### **Required Core: 6 units**

AJ 100 Introduction to Administration of Justice (3)

AJ 103 Concepts of Criminal Law I (3)

##### **List A: 6 units**

AJ 107 Crime and Control – An Introduction to Corrections (3)

AJ 111 Criminal Investigation (3)

AJ 115 Community and Human Relations (3)

AJ 126 Juvenile Delinquency and Legal Procedures (3)

AJ 130 Criminal Procedures (3)

AJ 131 Legal Aspects of Evidence (3)

AJ 132 Forensic Crime Scene Investigation (3)

##### **List B: 6-7 units**

PSYC 5 General Psychology (3)

SOCI 101 Introduction to Sociology (3)

MATH 150 Elementary Statistics with Probability (4)

or

PSYC 9A Introduction to Elementary Statistical Methods for the Study of Behavior (4)

or

SOCI 109 Introduction to Elementary Statistical Methods for the Study of Behavior (4)

##### **Total Units: 18-19**

### Administration of Justice 10

(formerly Administration of Justice 10ab)

#### **Introduction to Homeland Security**

*3 units; 3 hours lecture*

*Transfer CSU*

This course provides an overview of important components of homeland security, including various agencies and their interrelated responsibilities. Topics include historical events, critical threats, and legislative constraints that impact national security. The course clarifies the roles of military agencies and local, federal, and international law enforcement in combating terrorism and identifies characteristics, ideologies, motives, and behaviors of extremist groups that foster and support terrorist activities. Students will examine and interpret forensic evidence to reconstruct crimes of terrorism.

### Administration of Justice 11

#### **Intelligence and Security Management**

*3 units; 3 hours lecture*

*Recommended Preparation: Administration of Justice 10 and English A*

*Credit, degree applicable*

*Transfer CSU*

This course provides an introduction to intelligence analysis and security management, focused on the prevention of terrorist attacks and other threats to national security. Students learn about the national defense system, including private sector defense, and explore the vulnerabilities of these systems. Students are exposed to the intelligence community, how it operates, and examines issues regarding intelligence support of the Department of Homeland Security.

**Administration of Justice 12****Transportation and Border Security Management***3 units; 3 hours lecture**Recommended Preparation: Administration of Justice 11**Credit, degree applicable**Transfer CSU*

This course provides an overview of modern border and transportation security challenges. Different methods designed to address these challenges will be explored. The course covers a time period from post 9/11 to present. Topics associated with border security and security for transportation infrastructure include: ships, aircraft, railways, pipelines, and highways. Additional topics include technological solutions employed to enhance security of borders and transportation systems. Students will discuss the legal, economic, political, and cultural concerns as well as impacts associated with transportation and border security.

**Administration of Justice 21****Introduction to Emergency Management***3 units; 3 hours lecture**Recommended Preparation: Administration of Justice 10**Credit, degree applicable**Transfer CSU*

This course introduces students to the fundamentals of emergency management. Students will learn the principles of emergency management, and will become familiar with the major issues confronting emergency management providers. The course will emphasize the elements of the Incident Command System. Students will participate in a series of simulated emergency management exercises. Case studies of large scale emergency events will be covered.

**Administration of Justice 26****Introduction to Terrorism and Counterterrorism***3 units; 3 hours lecture**Recommended Preparation: Administration of Justice 11**Credit, degree applicable**Transfer CSU*

This course will provide students with an overview of domestic and transnational terrorism. Varying definitions, perspectives, and underlying causes will be explored along with terrorist weapons of choice. Terrorist and counterterrorist organizations will be examined, as well as incidents involving terrorist efforts, successes, and failures.

**Administration of Justice 49****Penal Code 832 - Arrest and Firearms***3 units; 2.5 hours lecture, 1.5 hours lab per week to be arranged**Enrollment Limitation: Students must have a Department of Justice (DOJ) background clearance prior to enrolling in this course.**Recommended Preparation: English 84**Credit, degree applicable**Transfer CSU*

This course 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, ethical use of force, arrest and control methods, and firearms training. The course has 45 hours of lecture covering California laws of arrest and firearms, 9 hours of training in arrest and control methods, 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 and control methods, and the basic principles of firearms training that 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 pass/no pass option.**Note: Students pay fees for this course for Department of Justice background check and clearance, firing range, ammunition and targets.***Administration of Justice 95**

(formerly 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\**

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Administration of Justice field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

*\*Note: Transfer limitations apply.**Note: The total units earned for Cooperative Work Experience Education 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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**Administration of Justice 99**

(formerly 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

This course provides special advanced studies in a subject field of Administration of Justice not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Administration of Justice projects (54 hours per unit).

*\*Note: Transfer limitations apply.*

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: English A

Credit, degree applicable

Transfer CSU, UC

This course introduces students to the characteristics of the criminal justice system in the United States. Focus is placed on examining crime measurement, theoretical explanations of crime, responses to crime, components of the system, and current challenges to the system. The course examines the evolution of the principles and approaches utilized by the justice system and the evolving forces which have shaped those principles and approaches. Although justice structure and process are examined in a cross context, emphasis is placed on the United States justice system, particularly the structure and function of police, courts, and corrections. Students are introduced to the origins and development of criminal law, legal process, sentencing, and incarceration policies.

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

3 units; 3 hours lecture

Recommended Preparation: English A

Credit, degree applicable

Transfer CSU, UC\*

In this course, students examine the historical development and philosophy of law and its application to the criminal justice system. Topics covered include legal research, case law, classifications of crime, crimes against persons and property, and crimes against the state.

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

**Administration of Justice 106****Criminal Justice Recruitment and Selection**

3 units; 3 hours lecture

Recommended Preparation: English 84

Credit, degree applicable

Transfer CSU

This course presents an overview of the criminal justice recruitment and selection process, and provides opportunities to gain knowledge and skills that will enable them to be more successful at passing the various testing phases in a criminal justice testing and background investigation process. Instruction begins with the application phase, then addresses the various steps in the hiring process including: the written examination, oral interview, written and oral psychological exams, polygraph exam, physical agility test and background investigation.

**Administration of Justice 107****Crime and Control – An Introduction to Corrections**

3 units; 3 hours lecture

Recommended Preparation: English A

Credit, degree applicable

Transfer CSU

This is a basic course covering crime, criminal behavior and social attempts at controlling such behavior. Emphasis in this course is placed on traditional types of punishment, such as incarceration, as well as rehabilitation, probation, parole, and diversion. Incarceration issues include officer and inmate safety, physical security aspects of prison, 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

Prerequisite: Administration of Justice 109

Recommended Preparation: English A

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 1A**Credit, degree applicable**Transfer CSU, UC*

This course examines the complex, dynamic relationship between communities and the justice system in addressing crime and conflict with an emphasis on the challenges and prospects of administering justice within a diverse multicultural population. Topics include the shared and conflicting values in culture, religion, and law.

**Administration of Justice 126*****Juvenile Delinquency and Legal Procedures****3 units; 3 hours lecture**Recommended Preparation: eligibility for English 1A**Credit, degree applicable**Transfer CSU*

This course is an examination of the origin, development, and organization of the juvenile system as it evolved in the American justice system. The course explores the theories that focus on juvenile law, courts and processes, and the constitutional protections extended to juveniles administered in the American justice system.

**Administration of Justice 130*****Criminal Procedures****3 units; 3 hours lecture**Recommended Preparation: English A**Credit, degree applicable**Transfer CSU*

This course is an in-depth study of the procedures by which a criminal defendant is tried. As enumerated by the Constitution's due process clauses of the Fifth and Fourteenth Amendments, this course examines how this process functions from the point at which a crime is committed to arrest, trial and appeal.

**Administration of Justice 131*****Legal Aspects of Evidence****3 units; 3 hours lecture**Recommended Preparation: eligibility for English 1A**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*****Forensic Crime Scene Investigation****3 units; 3 hours lecture**Credit, degree applicable**Transfer CSU*

This course provides students with an introduction to forensic crime scene investigation (CSI). It examines the methods utilized in the forensic analysis of crime scenes, pattern evidence, instruments, firearms, questioned documents and controlled substances. The student will gain an understanding of the workings of a CSI unit, an overview of the relationship between forensic science and law enforcement, as well as evidence collection and analysis rules.

**Administration of Justice 133*****Fingerprint Classification and Investigation****3 units; 3 hours lecture**Credit, degree applicable**Transfer CSU*

This course covers the basic principles of fingerprints, including lifting, classification, and identification. The history and scientific basis for fingerprints are studied in relation to current practices and procedures.

**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 and 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.

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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 142****Introduction to Digital Evidence***3 units; 3 hours lecture**Recommended Preparation: Administration of Justice 100 and English A**Credit, degree applicable**Transfer CSU*

This course provides students with an understanding of digital crime scene investigation. Topics include court presentation of evidence requirements involving digital forensic evidence, digital imaging, and metadata. Recognized legal and professional standards will be reviewed. Students will be exposed to contemporary digital forensic tools and processes used in collecting digital evidence from seizure to the admission as evidence in a criminal trial. Procedural and legal issues in the handling, processing, and examination of digital evidence will be studied. Students will learn about methods of handling the chain of custody regarding some digital evidence, and discovery procedures.

**Administration of Justice 150****Peace Officer Training Module – Level III***7 units; 5.5 hours lecture, 3.5 hours lab per week to be arranged**Enrollment Limitation:*

1. Current medical examination conducted within 6 months (for safety and liability reasons).
2. Students must apply for and receive a California Department of Justice Firearms and Arrest Clearance (Penal Code Section 13511.5).
3. Possession of a valid California driver's license. Copy of a current DMV printout will be requested.

*Credit, degree applicable**Transfer CSU*

This course is designed for California Commission on Peace Officer Standards and Training (P.O.S.T.) certified Training Module - Level III peace officer training candidates. A Level III peace officer may perform specified limited support duties that are not likely to result in physical arrests.

*The student will participate in a 162 hour course of instruction and training emphasizing basic law enforcement philosophy, procedures, tactics, and techniques. The course is certified pursuant to California Penal Code Section 830.6(a)(1) and 832.6(a)(3).*

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

*Note: Students pay mandatory fees for Department of Justice background check and clearance, firing range, ammunition and targets, physical training clothing, and physical examination fees.*

**Administration of Justice 155****Peace Officer Training Module - Level II***10 units; 9 hours lecture, 3.5 hours lab per week to be arranged**Prerequisite: Possession of a current Commission on Peace Officer Standards and Training (P.O.S.T.) Level III certificate**Enrollment Limitation:*

1. Current medical examination conducted within 6 months (for safety and liability reasons).
2. Current California Department of Justice Firearms and Arrest Clearance obtained within 6 months (Penal Code Section 13511.5).
3. Possession of a valid California driver's license. Copy of a current DMV printout will be requested.

*Credit, degree applicable**Transfer CSU*

This course is designed for California Commission on Peace Officer Standards and Training (P.O.S.T.) Certified Training Module - Level II peace officer training candidates. A Level II reserve officer may perform general law enforcement assignments while under the immediate supervision of a peace officer. These officers may also work assignments authorized for Level III reserve officers.

*Note: The student will participate in a 225 hour course of instruction and training emphasizing basic law enforcement philosophy, procedures, tactics, and techniques. The course is certified pursuant to California Penal Code Section 830.6(a)(1) and 832.6(a)(2).*

*Note: Students pay mandatory fees for Department of Justice background check and clearance, firing range, ammunition and targets, physical training clothing, and physical examination fees.*

**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 Certificates 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, installation, and energy efficient operation of residential, commercial and industrial heating, air conditioning, refrigeration, and control systems. Students will learn to read wiring diagram, diagnose control circuits, operate test equipment, and service pneumatic, electric and electronic controls. Competencies will be assessed in accordance with the Environmental Protection Agency certificate criteria. Students completing the program may expect to enter industry as an advanced apprentice or entry-level heating, ventilation, air conditioning, and controls technician.

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

Course	Title
ACR 5	Electrical Applications (4)
ACR 6	Refrigeration and Air Conditioning Control Systems (4)
ACR 21	Air Conditioning Fundamentals (4)
ACR 23	Commercial Refrigeration Applications (4)
ACR 25	Energy Efficient Residential, Commercial and Industrial Air Conditioning (4)
ACR 27	Heating Technologies (4)
ACR 30	Electric Controls (2)
ACR 31	HVAC Electronics (2)
ACR 34	HVAC Customer Service and Environmental Protection Agency (EPA) and NATE Certification Training (1)
ACR 61	Fundamentals of Automation Systems (3)
ACR 62	Energy Control and Optimization Systems (4)
<b>Total Units: 36</b>	

### Recommended Electives:

ACR 95	Cooperative Work Experience Education (2-4)
BUS 15	Business Mathematics (3)
CIS 13	Computer Information Systems (3)
CTEC 100	Building Fundamentals (4)

## Certificates of Achievement

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

### Air Conditioning Certificate of Achievement

Course	Title
ACR 5	Electrical Applications (4)
ACR 21	Air Conditioning Fundamentals (4)
ACR 25	Energy Efficient Residential, Commercial and Industrial Air Conditioning (4)
ACR 27	Heating Technologies (4)
ACR 34	HVAC Customer Service and Environmental Protection Agency (EPA) and NATE Certification Training (1)
<b>Total Units: 17</b>	

### Air Conditioning and Refrigeration Electric Controls Certificate of Achievement

Course	Title
ACR 5	Electrical Applications (4)
ACR 6	Refrigeration and Air Conditioning Control Systems (4)
ACR 30	Electric Controls (2)
ACR 31	HVAC Electronics (2)
ACR 34	HVAC Customer Service and Environmental Protection Agency (EPA) and NATE Certification Training (1)
<b>Total Units: 13</b>	

### Heating, Ventilation, and Air Conditioning (HVAC) and Refrigeration Certificate of Achievement

Course	Title
ACR 5	Electrical Applications (4)
ACR 6	Refrigeration and Air Conditioning Control Systems (4)
ACR 21	Air Conditioning Fundamentals (4)
ACR 23	Commercial Refrigeration Applications (4)
ACR 25	Energy Efficient Residential, Commercial and Industrial Air Conditioning (4)
ACR 27	Heating Technologies (4)
ACR 30	Electric Controls (2)
ACR 31	HVAC Electronics (2)
ACR 34	HVAC Customer Service and Environmental Protection Agency (EPA) and NATE Certification Training (1)
ACR 61	Fundamentals of Automation Systems (3)
ACR 62	Energy Control and Optimization Systems (4)
BUS 15	Business Mathematics (3)
<b>Total Units: 39</b>	

**Refrigeration Certificate of Achievement**

Course	Title
ACR 6	Refrigeration and Air Conditioning Control Systems (4)
ACR 21	Air Conditioning Fundamentals (4)
ACR 23	Commercial Refrigeration Applications (4)
ACR 34	HVAC Customer Service and Environmental Protection Agency (EPA) and NATE Certification Training (1)
<b>Total Units: 13</b>	

For Gainful Employment program information, please visit [www.elcamino.edu/academics/indtech/acr](http://www.elcamino.edu/academics/indtech/acr)

**Air Conditioning and Refrigeration 5****Electrical Applications**

4 units; 3 hours lecture, 3 hours lab

*Recommended Preparation: Air Conditioning and Refrigeration 21*

*Credit, degree applicable*

*Transfer CSU*

The course focuses on basic electrical theory and training in installing, servicing, troubleshooting, and operating electrical control systems for air conditioning and refrigeration technology with the use of electrical diagrams. Single phase and three phase electrical power for air conditioning and refrigeration systems are covered in classroom discussions and laboratory assignments.

**Air Conditioning and Refrigeration 6****Refrigeration and Air Conditioning Control Systems**

4 units; 3 hours lecture, 3 hours lab

*Recommended Preparation: Air Conditioning and Refrigeration 21*

*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 are needed to diagnose electrical problems and safety to ensure 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 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) and best solar placement 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.

**Air Conditioning and Refrigeration 23****Commercial Refrigeration Applications**

4 units; 3 hours lecture, 3 hours lab

*Prerequisite: Air Conditioning and Refrigeration 21 with a minimum grade of C or equivalent*

*Credit, degree applicable*

*Transfer CSU*

This course explores refrigeration theory, characteristics of refrigerants, temperature and pressure, tools and equipment, soldering, brazing, commercial refrigeration systems, system components, compressors, evaporators, and metering devices. Students will learn to charge commercial systems with new Environmental Protection Agency (EPA) refrigerants and evaluate the proper operation of systems. Troubleshooting techniques are explained with the use of wiring diagrams and electric meters. Students will learn to service and troubleshoot commercial refrigeration ice machines, coolers, walk-ins, refrigerators, and freezers. Students will be introduced to a variety of commercial refrigeration systems and components.

**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 with a minimum grade of C or equivalent*

*Credit, degree applicable*

*Transfer CSU*

This course covers energy efficient green technology (high efficiency), advanced residential, commercial and industrial air conditioning. Labs include the use of air conditioning test equipment, installation, repair and maintenance of various types of air conditioning systems. Topics include various techniques of troubleshooting electrical and mechanical problems; equipment operational efficiencies and building envelope condition; performing indoor air-quality and system efficiency testing; and system airflow and operational efficiencies.

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

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**Air Conditioning and Refrigeration 27***Heating Technologies**4 units; 3 hours lecture, 3 hours lab**Prerequisite: Air Conditioning and Refrigeration 21 with a minimum grade of C or equivalent**Credit, degree applicable**Transfer CSU*

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

**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 and electronic components, motors, and circuitry for air conditioning and refrigeration controls. Students apply theoretical principles in diagnosing electrical and electronic problems and safely make necessary repairs to refrigeration, heating, ventilating and air conditioning (HVAC) systems. Energy efficiency practices and process related to electronic and electronic controls is the focus of this course.

**Air Conditioning and Refrigeration 31***HVAC Electronics**2 units; 2 hours lecture**Recommended Preparation: Air Conditioning and Refrigeration 21**Credit, degree applicable**Transfer CSU*

In this course, students learn the fundamentals of Direct Digital Controls (DDC) used in Heating, Ventilation, Air Conditioning, and Refrigeration (HVACR) systems. The topics covered include basic DDC system components, single and multi-function electronic controls, DDC and pneumatic Variable Air Volume (VAV) systems, variable speed motors, controllers, programmable and configurable logic controller operation and application, introduction to communication protocols, and electronic diagram interpretation.

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

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**Air Conditioning and Refrigeration 34***HVAC Customer Service and Environmental Protection Agency (EPA) and NATE Certification Training**1 unit; 1 hour lecture**Recommended Preparation: Air Conditioning and Refrigeration 21 or Air Conditioning and Refrigeration 22**Credit, degree applicable**Transfer CSU*

This is a course in Heating, Ventilation, and Air Conditioning (HVAC) customer service, Environmental Protection Agency (EPA) Section 608 Certification, and North American Technician Excellence (NATE) Certification. Topics covered include communication skills, problem solving, interview skills, refrigerant recovery and recycling, laws, regulations, and energy efficiency. Students learn vital workplace skills through designed exercises as well as how employers evaluate these skills. Students can prepare for universal EPA and NATE certification.

**Air Conditioning and Refrigeration 61***Fundamentals of Automation Systems**3 units; 3 hours lecture**Recommended Preparation: Air Conditioning and Refrigeration 21 or Air Conditioning and Refrigeration 31**Credit, degree applicable**Transfer CSU*

This course is an introduction to the fundamentals of automation, commissioning, re-commissioning, retro-commissioning, installation, service and troubleshooting of mechanical, electrical, and Direct Digital Control (DDC) systems for the Heating, Ventilation, Air-Conditioning, and Refrigeration (HVACR) industry. This course includes a review of automation system communication protocols and unit supervisory level programming.

**Air Conditioning and Refrigeration 62***Energy Control and Optimization Systems**4 units; 3 hours lecture, 3 hours lab**Prerequisite: Air Conditioning and Refrigeration 61 with a minimum grade of C**Credit, degree applicable**Transfer CSU*

In this course, students will apply knowledge gained to develop, plan, direct, implement, optimize, and sustain system energy efficiency and control in single and multi-site locations. Course topics include direct digital controls, programmable controls, configurable controllers, multi-zone systems, communication protocols, control system commissioning, logic circuits, object and property program structure, and interoperability.

**Air Conditioning and Refrigeration 95**

(formerly 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\*

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Air Conditioning and Refrigeration field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

\*Note: Transfer limitations apply.

Note: The total units earned for Cooperative Work Experience Education may not exceed 16 units.

**Air Conditioning and Refrigeration 99**

(formerly Air Conditioning and Refrigeration 99abc)

**Independent Study**

1-3 units; hours to be arranged

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

Credit, degree applicable

Transfer CSU\*

This course provides special advanced studies in a subject field of Air Conditioning and Refrigeration not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Air Conditioning and Refrigeration projects (54 hours per unit).

\*Note: Transfer limitations apply.

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 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****Anatomy and Physiology 34A****Anatomy and Physiology I**

4 units; 3 hours lecture, 5 hours lab

Prerequisite: Chemistry 4 or 20, or 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.

**Course Title*****Required Core: 12 units***

ANTH 1	Introduction to Physical Anthropology (3)
ANTH 2	Introduction to Cultural Anthropology (3)
ANTH 3	Introduction to Archaeology (3)
ANTH 4	Language and Culture (3)

***7-9 units from:***

ANTH 5	Physical Anthropology Laboratory (1)
ANTH 6	Native Peoples of North America (3)
ANTH 7	Native Peoples of South America (3)
ANTH 8	Ancient Civilizations of Mesoamerica (3)
ANTH 9	Women, Culture, and Society (3)
ANTH 11	Anthropology of Religion, Magic and Witchcraft (3)
ANTH 12	Ancient Civilizations of the Old World (3)
GEOG 5	World Regional Geography (3)

**Total Units: 19-21****Preparation for the Anthropology Transfer Major**

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

**ANTHROPOLOGY****AA-T 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. Competencies will be assessed regularly through examinations and projects.

The Associate in Arts for Transfer (AA-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AA-T are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AA-T, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AA-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AA-T.

**Course Title****Required Core: 9 units**

ANTH 1	Introduction to Physical Anthropology (3)
ANTH 2	Introduction to Cultural Anthropology (3)
ANTH 3	Introduction to Archaeology (3)

**List A: 3-4 units**

ANTH 4	Language and Culture (3)
MATH 150	Elementary Statistics with Probability (4)
or	
PSYC 9A	Introduction to Elementary Statistical Methods for the Study of Behavior (4)
or	
SOCI 109	Introduction to Elementary Statistical Methods for the Study of Behavior (4)

**List B: 3-4 units****Any course from List A not already completed**

ANAT 32	General Human Anatomy (4)
GEOG 8	Introduction to Geographic Information Systems (4)
or	
GEOL 1	Physical Geology (3)
and	
GEOL 3	Physical Geology Laboratory (1)

**List C: 3-4 units****Any course from List A or List B not already completed**

ANTH 5	Physical Anthropology Laboratory (1)
ANTH 6	Native Peoples of North America (3)
ANTH 7	Native Peoples of South America (3)
ANTH 8	Ancient Civilizations of Mesoamerica (3)
ANTH 9	Women, Culture, and Society (3)
ANTH 11	Anthropology of Religion, Magic and Witchcraft (3)
ANTH 12	Ancient Civilizations of the Old World (3)
GEOG 2	Cultural Geography (3)
GEOG 5	World Regional Geography (3)
HIST 122	United States Social History: Cultural Pluralism in America (3)
HIST 178	History of China (3)
HIST 183	Introduction to African History, Prehistory to 1885 (3)
HIST 184	Introduction to African History, 1885 to the Present (3)
SOCI 101	Introduction to Sociology (3)
SOCI 107	Issues of Race and Ethnicity in the United States (3)
SOCI 108	Global Perspectives on Race and Ethnicity (3)

**Total Units: 18-21****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 biological diversity of the human species and our closest living relative, the non-human primates. Topics include genetics, mechanisms of evolutionary change, human variation, and the reconstruction of human evolutionary history through examination of the fossil record.

**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; religious systems; and 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, topics of concern, and research methodologies commonly encountered within the field of archaeology. Students will be introduced to basic techniques of soils analysis and archaeological materials analysis.

**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. Using a cross-cultural perspective, students will examine the relationship between culture and the ways in which humans communicate. Topics include language acquisition, structure, diversity, and change. The social and non-verbal aspects of language will also be explored.

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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 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 hands-on activities to explore the primary topics of physical anthropology. Topics will include principles of evolution, human genetics, forensic anthropology, behavior and anatomy of nonhuman primates, human variation, and fossil evidence for human evolution.

**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 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 this region from the entry of humans into the Americas at the end of the Upper Paleolithic until the invasion of the Spaniards in the early sixteenth century. Special attention will be given to those societies that achieved chiefdom or state-level political complexity. Topics will include the languages, writing systems, belief systems, political systems, economies, monuments and art of these peoples.

**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 11*****Anthropology of Religion, Magic 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 Old World****3 units; 3 hours lecture**Recommended Preparation: eligibility for English 1A**Credit, degree applicable**Transfer CSU, UC*

This course traces the emergence of earliest states of the Middle East, Asia, and Europe. The cultural achievements linked to state development are traced through a survey of evidence recovered from the archaeological record, including the earliest written texts. Social and cultural antecedents of the earliest states in the Middle East will be explored. Students will be introduced to anthropological theories that seek to model and explain the features and institutions of state-level societies.

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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

## 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 a university architecture program.

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

### Course Title

#### *Required Core: 23 units*

ARCH 100	An Orientation to Architecture (1)
ARCH 104	History of Western Architecture (3)
ARCH 119	Computer Aided Architectural Drafting (3)
ARCH 150A	Construction Documentation I (3)
ARCH 150B	Construction Documentation II (3)
ARCH 170	Architectural Graphics Techniques (3)
ARCH 171	Architectural Three-Dimensional Illustration (3)
ARCH 199	Architecture Design Studio (4)

#### *12-13 units from:*

ARCH 121	Building Information Modeling I (3)
ARCH 125	Building Information Modeling II (3)
ARCH 158	Structures Analysis-Timber (3)
ARCH 172	Architectural Color Rendering Techniques (3)
ARCH 179	Design/Build Studio (4)
ET 165	Sustainable and Regenerative Practices in Site and Landscape Development (3)

### Total Units: 35-36

#### Preparation for the Architecture Transfer Major

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

#### Certificate of Achievement

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the requirements for the certificate must be completed at El Camino College.

#### Architecture Certificate of Achievement

### Course Title

#### *Required Core: 23 units*

ARCH 100	An Orientation to Architecture (1)
ARCH 104	History of Western Architecture (3)
ARCH 119	Computer Aided Architectural Drafting (3)
ARCH 150A	Construction Documentation I (3)
ARCH 150B	Construction Documentation II (3)
ARCH 170	Architectural Graphics Techniques (3)
ARCH 171	Architectural Three-Dimensional Illustration (3)
ARCH 199	Architecture Design Studio (4)

#### *12-13 units from:*

ARCH 121	Building Information Modeling I (3)
ARCH 125	Building Information Modeling II (3)
ARCH 158	Structures Analysis – Timber (3)
ARCH 172	Architectural Color Rendering Techniques (3)
ARCH 179	Design/Build Studio (4)
ET 165	Sustainable and Regenerative Practices in Site and Landscape Development (3)

### Total Units: 35-36

For Gainful Employment program information, please visit [www.elcamino.edu/academics/indtech/architecture](http://www.elcamino.edu/academics/indtech/architecture)



**Architecture 95**

(formerly 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\**

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Architecture field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

*\*Note: Transfer limitations apply.*

*Note: The total units earned for Cooperative Work Experience Education may not exceed 16 units.*

**Architecture 99**

(formerly 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\**

This course provides special advanced studies in a subject field of Architecture not covered in the regular departmental offerings. Regular conferences with instructor are coordinated with assigned Architecture projects (54 hours per unit).

*\*Note: Transfer limitations apply.*

*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.

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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 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 119**

(formerly 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 121**

(formerly Architecture 121abcd)

**Building Information Modeling I**

3 units; 2 hours lecture, 4 hours lab

*Recommended Preparation: Architecture 119*

*Credit, degree applicable*

*Transfer CSU*

This introductory course in Building Information Modeling (BIM) uses parametric building modeling software to create intelligent, three-dimensional (3D) computer models of buildings and their components. Students will create a complete set of construction documents of a commercial building complete with floor plans, building sections, elevations, details, schedules and 3D views using BIM techniques.

**Architecture 125**

(formerly Architecture 125abcd)

**Building Information Modeling II**

3 units; 2 hours lecture, 4 hours lab

*Recommended Preparation: Architecture 121*

*Credit, degree applicable*

*Transfer CSU*

This course teaches intermediate techniques in Building Information Modeling (BIM) using various architectural computer aided design (CAD) software including Autodesk Revit. Topics include computer animation, rendering, design analysis and documentation of buildings. Students will create detailed computer models of buildings and generate floor plans, building sections, elevations, details and schedules from the model.

**Architecture 150A****Construction Documentation I***3 units; 2 hours lecture, 4 hours lab**Credit, degree applicable**Transfer CSU*

This course is an introduction in creating construction documents for a small house. 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, sketching and Computer Aided Drafting (CAD) will be introduced to students to create construction documents.

**Architecture 150B****Construction Documentation II***3 units; 2 hours lecture, 4 hours lab**Prerequisite: Architecture 119 and 150A with a minimum grade of C or equivalent**Credit, degree applicable**Transfer CSU*

This course is an advanced-level architectural course in creating all the construction documents needed for a new two-story residential building. Current zoning and building codes will be explored to understand the design impact on the project residence and eco-friendly design and construction technology. Sketching techniques and Computer Aided Design (CAD) will be developed to create construction documents.

**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 Graphics Techniques***3 units; 2 hours lecture, 4 hours lab**Credit, degree applicable**Transfer CSU*

This introductory course acquaints the beginning student with the range of graphic tools which are available for conveying architectural ideas. Various graphic conventions and techniques will be presented and the rationale behind their use explained.

**Architecture 171****Architectural Three-Dimensional Illustration***3 units; 2 hours lecture, 4 hours lab**Credit, degree applicable**Transfer CSU*

This is a course in three-dimensional pictorial drawing that covers one, two and three point perspectives. Basic methods of construction are used in producing these drawings. Special attention is given to shortcut methods used by professionals. The use of shade and shadow, reflections and mirror images are also covered.

**Architecture 172****Architectural Color Rendering Techniques***3 units; 2 hours lecture, 4 hours lab**Credit, degree applicable**Transfer CSU*

This course is the study of rendering techniques used by illustrator to delineate architectural drawings. Topics include color theory and hue schemes. Both manual and computer graphic techniques will be taught

**Architecture 179***(formerly Architecture 180abcd)***Design/Build Studio***4 units; 2 hours lecture, 6 hours lab**Prerequisite: Architecture 150A with a minimum grade of C or equivalent**Recommended Preparation: Construction Technology 100 or 110**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 studied.

**Architecture 199***(formerly Architecture 199abcd)***Architecture 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*

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.

## ART

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

#### Fine Arts Division

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

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

#### Art – Art History Option:

##### Course Title

##### Required Core: 9 units

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

##### 15 units from:

ART 102A	History of Western Art – Prehistoric to Gothic (3)
ART 102B	History of Western Art – Proto-Renaissance to 19th Century (3)
ART 102C	History of Western Art – 19th Century to Contemporary Times (3)
ART 106	Cross-Cultural Art (3)
ART 109	Contemporary Art in World Cultures (3)
ART 194	Gallery Management and Artist Career Issues (4)
ART 205A	History of Asian Art – India and Southeast Asia (3)
ART 205B	History of Asian Art – China, Korea, and Japan (3)
ART 207	Art History of Mexico and Central and South America (3)
ART 208	History of American Art (3)
or	
ART 208H	Honors History of American Art (3)
ART 209	History of African Art (3)

#### 2-3 units from:

ART 129	Fundamentals of Color (3)
ART 131	Lettering and Typography I (3)
ART 132	Advertising Design I (3)
ART 133	Graphic Design (3)
ART 141	Digital Art Fundamentals (3)
ART 142	Digital Photography (3)
ART 143	Digital Publishing Fundamentals (3)
ART 144	3D Modeling and Animation (3)
ART 145	Interactive Media Design (3)
ART 146	Designing for the World Wide Web (3)
ART 147	Motion Graphics (3)
ART 152	Rendering (3)
ART 153	Illustration I (3)
ART 161	Beginning Ceramics (3)
ART 173	Introduction to Jewelry and Metalsmithing (3)
ART 181	Beginning Sculpture (3)
ART 187	Printmaking I – Etching and Relief (3)
ART 210	Drawing Fundamentals II (3)
ART 217	Life Drawing I (3)
ART 218	Life Drawing II (3)
ART 219	Watercolor Painting I (3)
ART 220	Watercolor Painting II (3)
ART 222	Fundamentals of Painting I (3)
ART 223A	Fundamentals of Painting II (3)
ART 223B	Fundamentals of Painting III (3)
ART 230	Two-Dimensional Design II (3)
ART 231	Lettering and Typography II (3)
ART 232	Advertising Design II (3)
ART 233	Graphic Design II (3)
ART 253	Illustration II (3)
ART 262	Intermediate Ceramics (3)
ART 263	Advanced Ceramics (3)
ART 274	Jewelry Fabrication (3)
ART 275	Jewelry Casting (3)
ART 282	Life Sculpture (3)
ART 283	Bronze Casting (3)
ART 288	Printmaking II – Etching and Relief (3)
ART 289	Lithography (3)
ART 290	Screen Printing (3)
PHOT 101	Elementary Photography (2)

#### Total Units: 26-27

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

**Art – Studio Art Option:****Course Title****Required Core: 9 units**

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

**6 units from:**

ART 102A	History of Western Art – Prehistoric to Gothic (3)
ART 102B	History of Western Art – Proto-Renaissance to 19th Century (3)
ART 102C	History of Western Art – 19th Century to Contemporary Times (3)
ART 106	Cross-Cultural Art (3)
ART 109	Contemporary Art in World Cultures (3)
ART 205A	History of Asian Art – India and Southeast Asia (3)
ART 205B	History of Asian Art – China, Korea, and Japan (3)
ART 207	Art History of Mexico and Central and South America (3)
ART 208	History of American Art (3)
or	
ART 208H	Honors History of American Art (3)
ART 209	History of African Art (3)

**12 units from:**

ART 129	Fundamentals of Color (3)
ART 131	Lettering and Typography I (3)
ART 132	Advertising Design I (3)
ART 133	Graphic Design (3)
ART 141	Digital Art Fundamentals (3)
ART 142	Digital Photography (3)
ART 143	Digital Publishing Fundamentals (3)
ART 144	3D Modeling and Animation (3)
ART 145	Interactive Media Design (3)
ART 146	Designing for the World Wide Web (3)
ART 147	Motion Graphics (3)
ART 152	Rendering (3)
ART 153	Illustration I (3)
ART 161	Beginning Ceramics (3)
ART 173	Introduction to Jewelry and Metalsmithing (3)
ART 181	Beginning Sculpture (3)
ART 187	Printmaking I – Etching and Relief (3)
ART 194	Gallery Management and Artist Career Issues (4)
ART 210	Drawing Fundamentals II (3)
ART 217	Life Drawing I (3)
ART 218	Life Drawing II (3)
ART 219	Watercolor Painting I (3)
ART 220	Watercolor Painting II (3)

ART 222	Fundamentals of Painting I (3)
ART 223A	Fundamentals of Painting II (3)
ART 223B	Fundamentals of Painting III (3)
ART 224	Life Painting I (3)
ART 225	Life Painting II (3)
ART 230	Two-Dimensional Design II (3)
ART 231	Lettering and Typography II (3)
ART 232	Advertising Design II (3)
ART 233	Graphic Design II (3)
ART 253	Illustration II (3)
ART 262	Intermediate Ceramics (3)
ART 263	Advanced Ceramics (3)
ART 274	Jewelry Fabrication (3)
ART 275	Jewelry Casting (3)
ART 282	Life Sculpture (3)
ART 283	Bronze Casting (3)
ART 288	Printmaking II – Etching and Relief (3)
ART 289	Lithography (3)
ART 290	Screen Printing (3)
PHOT 101	Elementary Photography (2)

**Total Units: 27**

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

Painting and Drawing: Art 210, 217, 218, 219, 220, 222, 223A, 223B, 224, 225

Ceramics: Art 161, 262, 263

Computer Animation: Art 110, 141, 142, 144, 147, 217

Digital Illustration: Art 110, 130, 141, 142, 153, 253

Digital Photography: Art 110 or 130; Art 141, 142

Design: Art 129, 141, 142, 143, 144, 145

Graphic Design: Art 129, 131, 132, 133, 141, 142, 143, 144, 145, 146, 147, 152, 153, 231, 232, 253

Graphic Design for Print Publishing: Art 130, 131, 132, 141, 142, 143

Jewelry/Metalsmithing: Art 173, 274, 275

Photography 102, 202, 223A or 101

Printmaking: Art 187, 288, 289

Motion Graphics/Visual Effects: Art 130, 141, 142, 144, 147, Sculpture: Art 181, 282, 283

Television and Media: Communication Studies 270

Web Design: Art 130, 132, 141, 142, 145, 146

**Preparation for the Art Transfer Major**

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

**Certificates of Achievement Digital Arts**

A Certificate of Achievement will be granted upon completion of all program requirements. A minimum of 12 units required for the certificate must be completed at El Camino College.

**Computer Animation Certificate of Achievement****Course Title****Required Core: 26 units**

ART 110	Drawing Fundamentals I (3)
ART 130	Two-Dimensional Design I (3)
ART 131	Lettering and Typography I (3)
ART 141	Digital Art Fundamentals (3)
ART 142	Digital Photography (3)
ART 144	3D Modeling and Animation (3)
ART 145	Interactive Media Design (3)
ART 147	Motion Graphics (3)
ART 195	Portfolio and Career Planning for Artists and Designers (3)

**2-3 units from:**

ART 150	The Art of Photography (3)
PHOT 101	Elementary Photography (2)

**2 units from:**

ART 96	Cooperative Work Experience Education (2-4)
ART 99	Independent Study (1-3)

**6 units from:**

ART 146	Designing for the World Wide Web (3)
ART 160	Three-Dimensional Design (3)
ART 217	Life Drawing I (3)
ART 282	Life Sculpture (3)

**Total Units: 36-37****Digital Photography Certificate of Achievement****Course Title****Required Core: 30 units**

ART 110	Drawing Fundamentals I (3)
ART 130	Two-Dimensional Design I (3)
ART 131	Lettering and Typography I (3)
ART 141	Digital Art Fundamentals (3)
ART 142	Digital Photography (3)
ART 195	Portfolio and Career Planning for Artists and Designers (3)
PHOT 101	Elementary Photography (2)
PHOT 102	Basic Photography (3)
PHOT 202	Intermediate Photography (4)
PHOT 223A	Theory of Color/Color Printing (4)

**2 units from:**

ART 99	Independent Study (1-3)
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**6 units from:**

ART 143	Digital Publishing Fundamentals (3)
ART 144	3D Modeling and Animation (3)
ART 146	Designing for the World Wide Web (3)
ART 147	Motion Graphics (3)
PHOT 203	Advanced Photography (4)
PHOT 204	Portraiture (3)

**Total Units: 38-39****Illustration Certificate of Achievement****Course Title****Required Core: 29 units**

ART 110	Drawing Fundamentals I (3)
ART 130	Two-Dimensional Design I (3)
ART 131	Lettering and Typography I (3)
ART 141	Digital Art Fundamentals (3)
ART 142	Digital Photography (3)
ART 152	Rendering (3)
ART 153	Illustration I (3)
ART 195	Portfolio and Career Planning for Artists and Designers (3)
ART 217	Life Drawing I (3)
ART 253	Illustration II (3)

**2-3 units from:**

ART 150	The Art of Photography (3)
PHOT 101	Elementary Photography (2)

**2 units from:**

ART 96	Cooperative Work Experience Education (2-4)
ART 99	Independent Study (1-3)

**3 units from:**

ART 187	Printmaking I – Etching and Relief (3)
ART 219	Watercolor Painting I (3)
ART 222	Fundamentals of Painting I (3)

**Total Units: 36-37****Motion Graphics Certificate of Achievement****Course Title****Required Core: 26 units**

ART 110	Drawing Fundamentals I (3)
ART 130	Two-Dimensional Design I (3)
ART 131	Lettering and Typography I (3)
ART 141	Digital Art Fundamentals (3)
ART 142	Digital Photography (3)
ART 144	3D Modeling and Animation (3)
ART 145	Interactive Media Design (3)
ART 147	Motion Graphics (3)
ART 195	Portfolio and Career Planning for Artists and Designers (3)

**2-3 units from:**

ART 150	The Art of Photography (3)
PHOT 101	Elementary Photography (2)

**2 units from:**

ART 96	Cooperative Work Experience Education (2-4)
ART 99	Independent Study (1-3)

**6 units from:**

ART 146	Designing for the World Wide Web (3)
FILM 120	Introduction to Film/Video Production (3)
FILM 122	Production I (3)
FILM 128	Television Production (3)

**Total Units: 36-37**

**Web Design Certificate of Achievement****Course Title****Required Core: 27 units**

ART 110	Drawing Fundamentals I (3)
ART 130	Two-Dimensional Design I (3)
ART 131	Lettering and Typography I (3)
ART 132	Advertising Design I (3)
ART 141	Digital Art Fundamentals (3)
ART 142	Digital Photography (3)
ART 145	Interactive Media Design (3)
ART 146	Designing for the World Wide Web (3)
ART 195	Portfolio and Career Planning for Artists and Designers (3)

**2-3 units from:**

ART 150	The Art of Photography (3)
PHOT 101	Elementary Photography (2)

**2 units from:**

ART 96	Cooperative Work Experience Education (2-4)
ART 99	Independent Study (1-3)

**6-7 units from:**

ART 144	3D Modeling and Animation (3)
ART 147	Motion Graphics (3)
CIS 133	Mashup JavaScript, jQuery and AJAX (4)

**Total Units: 37-39****Certificates of Achievement**

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the units required for the certificate must be completed at El Camino College.

**Gallery Management Certificate of Achievement****Course Title****Required Core: 16 units**

ART 129	Fundamentals of Color (3)
ART 130	Two-Dimensional Design I (3)
ART 141	Digital Art Fundamentals (3)
ART 160	Three-Dimensional Design (3)
ART 194	Gallery Management and Artist Career Issues (4)

**6 units from:**

ART 101	Art and Visual Culture : A Global Perspective (3)
ART 102A	History of Western Art – Prehistoric to Gothic (3)
ART 102B	History of Western Art – Proto-Renaissance to 19th Century (3)
ART 102C	History of Western Art – 19th Century to Contemporary Times (3)
ART 106	Cross-Cultural Art (3)
ART 205A	History of Asian Art – India and Southeast Asia (3)
ART 205B	History of Asian Art – China, Korea, and Japan (3)
ART 207	Art History of Mexico and Central and South America (3)
ART 208	History of American Art (3)
ART 209	History of African Art (3)

**Total Units: 22****Jewelry Design and Fabrication Certificate of Achievement****Course Title****Required Core: 9 units**

ART 173	Introduction to Jewelry and Metalsmithing (3)
ART 274	Jewelry Fabrication (3)
ART 275	Jewelry Casting (3)

**9 units from:**

ART 101	Art and Visual Culture: A Global Perspective (3)
ART 110	Drawing Fundamentals I (3)
ART 130	Two-Dimensional Design I (3)
ART 141	Digital Art Fundamentals (3)
ART 160	Three-Dimensional Design (3)
BUS 24	Small Business Entrepreneurship (3)

**Total Units: 18**

A Certificate of Achievement in Visual Communications will be granted upon completion of all program requirements. A minimum of 12 units required for the certificate must be completed at El Camino College.

**Visual Communications Certificate of Achievement****Course Title****Required Core: 18 units**

ART 130	Two-Dimensional Design I (3)
ART 131	Lettering and Typography I (3)
ART 132	Advertising Design I (3)
ART 133	Graphic Design (3)
ART 141	Digital Art Fundamentals (3)
ART 146	Designing for the World Wide Web (3)

**3 units from:**

ART 143	Digital Publishing Fundamentals (3)
ART 145	Interactive Media Design (3)
ART 231	Lettering and Typography II (3)
ART 232	Advertising Design II (3)
ART 233	Graphic Design II (3)

**3-4 units from:**

BUS 12	Advertising (3)
BUS 14	Marketing (3)
BUS 24	Small Business Entrepreneurship (3)
CIS 30	Introduction to Electronic Commerce (3)
CIS 133	Mashup JavaScript, jQuery and AJAX (4)
CIS 136	Building Model Apps (3)
COMS 100	Public Speaking (3)

**3 units from:**

ART 129	Fundamentals of Color (3)
ART 142	Digital Photography (3)
ART 147	Motion Graphics (3)
ART 153	Illustration I (3)
JOUR 6	Basic Photojournalism (3)
or	
PHOT 106	Basic Photojournalism (3)

**6-7 units from capstone courses:**

ART 96	Cooperative Work Experience Education (2-4)
ART 99	Independent Study (1-3)
ART 195	Portfolio and Career Planning for Artists and Designers (3)

**Total Units: 33-35**

Note: Students may select one 3 unit course from the above lists of electives to complete required capstone units. Recommended Preparation: Art 110

For Gainful Employment program information, please visit [www.elcamino.edu/academics/finearts/art](http://www.elcamino.edu/academics/finearts/art)

**ART****Art History AA-T Degree***Fine Arts Division*

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

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

The Associate in Arts for Transfer (AA-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AA-T are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AA-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AA-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AA-T.

Course	Title
<b>Required Core: 9 units</b>	
ART 102A	History of Western Art – Prehistoric to Gothic (3)
ART 102B	History of Western Art – Proto-Renaissance to 19th Century (3)
ART 102C	History of Western Art – 19th Century to Contemporary Times (3)
<b>List A: 3 units</b>	
ART 205A	History of Asian Art – India and Southeast Asia (3)
ART 205B	History of Asian Art – China, Korea, and Japan (3)
ART 207	Art History of Mexico and Central and South America (3)
ART 209	History of African Art (3)
<b>List B: 3 units</b>	
ART 110	Drawing Fundamentals I (3)
ART 130	Two-Dimensional Design I (3)
ART 141	Digital Art Fundamentals (3)
ART 160	Three-Dimensional Design (3)
ART 161	Beginning Ceramics (3)
ART 181	Beginning Sculpture (3)
ART 217	Life Drawing I (3)
ART 222	Fundamentals of Painting I (3)
PHOT 102	Basic Photography (3)
<b>List C: 3 units</b>	
<b>Any course from List A or List B not already completed</b>	
ART 106	Cross-Cultural Art (3)
ART 109	Contemporary Art in World Cultures (3)
ART 150	The Art of Photography (3)
or	
PHOT 150	The Art of Photography (3)
ART 208	History of American Art (3)
<b>Total Units: 18</b>	

## ART

### Studio Arts AA-T Degree

#### Fine Arts Division

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

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

The Associate in Arts for Transfer (AA-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AA-T are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AA-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AA-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AA-T.

Course	Title
<b>Required Core: 12 units</b>	
ART 102B	History of Western Art – Proto-Renaissance to 19th Century (3)
ART 110	Drawing Fundamentals I (3)
ART 130	Two-Dimensional Design I (3)
ART 160	Three-Dimensional Design (3)
<b>List A: 3 units</b>	
ART 102A	History of Western Art – Prehistoric to Gothic (3)
ART 102C	History of Western Art – 19th Century to Contemporary Times (3)
ART 205A	History of Asian Art – India and Southeast Asia (3)
ART 205B	History of Asian Art – China, Korea, and Japan (3)
ART 207	Art History of Mexico and Central and South America (3)
ART 209	History of African Art (3)
<b>List B: 9 units</b>	
ART 129	Fundamentals of Color (3)
ART 131	Lettering and Typography I (3)
ART 132	Advertising Design I (3)
ART 141	Digital Art Fundamentals (3)
ART 143	Digital Publishing Fundamentals (3)
ART 144	3D Modeling and Animation (3)
ART 152	Rendering (3)
ART 161	Beginning Ceramics (3)
ART 173	Introduction to Jewelry and Metalsmithing (3)
ART 181	Beginning Sculpture (3)
ART 187	Printmaking I – Etching and Relief (3)
ART 210	Drawing Fundamentals II (3)
or	
ART 217	Life Drawing I (3)
ART 218	Life Drawing II (3)
ART 219	Watercolor Painting I (3)
ART 220	Watercolor Painting II (3)
ART 222	Fundamentals of Painting I (3)
ART 223A	Fundamentals of Painting II (3)
ART 224	Life Painting I (3)
ART 225	Life Painting II (3)
ART 230	Two-Dimensional Design II (3)
ART 231	Lettering and Typography II (3)
ART 232	Advertising Design II (3)
ART 262	Intermediate Ceramics (3)
ART 274	Jewelry Fabrication (3)
ART 282	Life Sculpture (3)
ART 283	Bronze Casting (3)
PHOT 101	Elementary Photography (2)
PHOT 102	Basic Photography (3)
PHOT 202	Intermediate Photography (4)
<b>Total Units: 24</b>	

**Art 96**

(formerly 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\*

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Art field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

\*Note: Transfer limitations apply.

Note: The total units earned for Cooperative Work Experience Education may not exceed 16 units.

**Art 99**

(formerly 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\*

This course provides special advanced studies in a subject field of Art not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Art projects (54 hours per unit).

\*Note: Transfer limitations apply.

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

**Art 101**

(formerly Art 1)

**Art and Visual Culture: A Global Perspective**

3 units; 3 hours lecture

*Recommended Preparation: eligibility for English 1A*

Credit, degree applicable

Transfer CSU, UC

This course is an introduction to art and visual culture across time and diverse cultures with a global perspective. Examining works of art through themes, theory, terminology and media, students acquire analytical and interpretive skills to develop visual literacy as well as an understanding of the role of art and visual culture in relation to contemporary life. This course explores how meaning is constructed, transmitted and negotiated in an increasingly visual world.

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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 102A**

(formerly 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 102B**

(formerly 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 19th centuries. The focus is on the Proto-Renaissance, Renaissance, Mannerism, and Baroque periods in Italy, Spain, Flanders, The Netherlands, France, England, Germany and the New World.

**Art 102C**

(formerly 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 Western Europe and the United States from the mid-nineteenth century to the late-twentieth century. Artworks, art movements, and art styles are studied in relation to relevant social, political, philosophical, and technological factors, and the accelerating changes that characterize the modern era. Students will see how the aesthetic of newness, originality, anti-academicism, and radical formal invention characteristic of avant-garde modernism was rooted in the deep-seated social changes and values that defined modernity. Students will be introduced to fundamental methods of analysis that will assist them in understanding art and aesthetic human activities.

**Art 106**

(formerly 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 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 global survey of contemporary art, students study recent works by artists from different geographical and cultural regions of the world. Emphasis is placed on artworks that reflect changes to world cultures resulting from colonization, war, and globalization and that capture the interconnections among world cultures and individuals from a humanistic perspective. Using a comparative and transnational framework, students identify commonalities and differences in the way diverse cultures and individuals are affected by and respond to global change.

**Art 110**

(formerly 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 129**

(formerly 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 130**

(formerly 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 131**

(formerly 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 132**

(formerly Art 39ab)

**Advertising Design I**

3 units; 2 hours lecture, 4 hours lab

Recommended Preparation: Art 131 or Art 141

Credit, degree applicable

Transfer CSU

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

**Art 133**

(formerly Art 43abcd)

**Graphic Design**

3 units; 2 hours lecture, 4 hours lab

Recommended Preparation: Art 131 or Art 141

Credit, degree applicable

Transfer CSU, UC

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

**Art 141**

(formerly Art 141abcd)

**Digital Art Fundamentals**

3 units; 2 hours lecture, 4 hours lab

Recommended Preparation: Art 110 or Art 130 with a minimum grade of C; eligibility for English 84; Business 52A or equivalent computer skills

Credit, degree applicable

Transfer CSU, UC

This course provides students with a foundation in the two basic types of graphics software, vector (drawing) and raster (painting/photography). Topics include integration of traditional design, color, and compositional principles with contemporary digital tools. Students will work on a variety of digital projects involving drawing, design, typography, photographic manipulation, and animation.

**Art 142**

(formerly Art 142abcd)

**Digital Photography**

3 units; 2 hours lecture, 4 hours lab

Prerequisite: Art 141 with a minimum grade of C

Recommended Preparation: Art 150 or Photography 101

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 142 is three units.

**Art 143**

(formerly Art 143abcd)

**Digital Publishing Fundamentals**

3 units; 2 hours lecture, 4 hours lab

Recommended Preparation: Art 131 or Art 141

Credit, degree applicable

Transfer CSU

This course is an introduction to fundamental concepts and practices of digital publishing for print and screen. Topics include integration of typography, color, images, and graphic design principles with contemporary digital tools. Students work on both individual and group projects.

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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 144**

(formerly Art 144abcd)

**3D Modeling and Animation**

3 units; 2 hours lecture, 4 hours lab

Prerequisite: Art 141 with a minimum grade of C

Recommended Preparation: Art 110

Credit, degree applicable

Transfer CSU

This course is an introduction to the concepts and techniques of digital three-dimensional (3D) modeling and animation. Students will receive hands-on experience with 3D software to create digital models, environments, characters, and animations.

**Art 145**

(formerly Art 145abcd)

**Interactive Media Design**

3 units; 2 hours lecture, 4 hours lab

Prerequisite: Art 141 with a minimum grade of C

Recommended Preparation: Art 146

Credit, degree applicable

Transfer CSU, UC

This course 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 146**

(formerly Art 146abcd)

**Designing for the World Wide Web**

3 units; 2 hours lecture, 4 hours lab

Prerequisite: Art 141 with a minimum grade of C

Recommended Preparation: Art 131 or Art 142

Credit, degree applicable

Transfer CSU

In this course, students design and create websites through hands-on experience with graphics software. Topics covered include the effective use of 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 147**

(formerly Art 147abcd)

**Motion Graphics**

3 units; 2 hours lecture, 4 hours lab

Prerequisite: Art 141 with a minimum grade of C

Recommended Preparation: Art 142

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 152**

(formerly Art 52abcd)

**Rendering**

3 units; 2 hours lecture, 4 hours lab

Prerequisite: Art 110 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course covers the basic methods and techniques of rendering. Emphasis is placed on the graphic representation of three-dimensional form, space, and volume within an illusory and sharp-focused context. Topics include form analysis and the application of media such as markers, water-based paint, ink, graphite, pastel and colored pencil. Preparation of art work for portfolio presentation will also be covered.

**Art 153**

(formerly Art 53ab)

**Illustration I**

3 units; 2 hours lecture, 4 hours lab

Prerequisite: Art 110 with a minimum grade of C

Recommended Preparation: Art 152

Credit, degree applicable

Transfer CSU

This course is an introduction to illustration and stresses the creative interpretation of various subjects, situations and themes within the context of commercial art applications such as advertising, editorial and institutional. Special emphasis is placed on the creation of illustrations from rough concept sketches through finished art work. Production and media processes, color analysis and application, and portfolio development and presentation will be presented.

**Art 160**

(formerly Art 31abcd)

**Three-Dimensional Design**

3 units; 2 hours lecture, 4 hours lab

Credit, degree applicable

Transfer CSU, UC

This course is an introduction to the concepts and processes of three-dimensional design. Students design and construct projects involving linear and architectural models as well as relief and solid forms. Emphasis is placed on creative solutions to design problems using various construction techniques and materials.

**Art 161**

(formerly 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 173**

(formerly 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, 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 181**

(formerly 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 187**

(formerly Art 87ab)

**Printmaking I - Etching and Relief**

3 units; 2 hours lecture, 4 hours lab

Credit, degree applicable

Transfer CSU, UC

This course is an introduction to non-toxic methods, materials, and processes of printmaking. Topics include relief (woodcut and linoleum) and intaglio (drypoint and etching). Color and black and white printing are included, as well as four color (CMYK) techniques.

**Art 194**

(formerly 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 195****Portfolio and Career Planning for Artists and Designers**

3 units; 3 hours lecture

Recommended Preparation: English 84

Credit, degree applicable

Transfer CSU

This course provides a survey of career and educational pathways in design and the visual arts. Instruction includes the professional protocols necessary to prepare and correctly submit a portfolio, application, resume, cover letter, and artist statement for transfer to four-year art programs, job applications, grants, and exhibitions. Interview strategies, freelance management skills, e-commerce, job search techniques, and effective self-promotion strategies will also be covered.

**Art 205A**

(formerly 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 205B**

(formerly 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 207**

(formerly 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 208**

(formerly 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 208H****Honors History of American Art**

3 units; 3 hours lecture

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

This course, designed for students in the Honors Transfer Program, is an introductory survey of American Art from its pre-colonial past to the contemporary era with a focus on the social, political, economic, and philosophical conditions that have resulted in a culturally diverse artistic tradition. The contributions and influences of immigrants, Native Americans, African Americans, Asian Americans, Chicano/Latino Americans, and European Americans will be studied in relation to historical contexts. This course is enriched through more extensive reading, writing, and research assignments using primary and scholarly secondary sources.

*Note: Students may take either Art 208 or Art 208H. Duplicate credit will not be awarded for Art 208 and Art 208H.*

**Art 209**

(formerly 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 210**

(formerly Art 11abcd)

**Drawing Fundamentals II**

3 units; 2 hours lecture, 4 hours lab

*Prerequisite: Art 110 with a minimum grade of C**Credit, degree applicable**Transfer CSU, UC*

This course provides intermediate instruction in drawing with emphasis on media development, pictorial space, composition, interpretation, and improvisation.

**Art 217**

(formerly Art 17ab)

**Life Drawing I**

3 units; 2 hours lecture, 4 hours lab

*Prerequisite: Art 110 with a minimum grade of C**Credit, degree applicable**Transfer CSU, UC*

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

**Art 218**

(formerly Art 18abcd)

**Life Drawing II**

3 units; 2 hours lecture, 4 hours lab

*Prerequisite: Art 217 with a minimum grade of C**Credit, degree applicable**Transfer CSU, UC*

This course is a continuation of Art 217. Advanced problems in representing the human form are covered, with an increased emphasis on research and innovation.

**Art 219**

(formerly Art 19ab)

**Watercolor Painting I**

3 units; 2 hours lecture, 4 hours lab

*Prerequisite: Art 110 with minimum grade of C**Credit, degree applicable**Transfer CSU, UC*

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

**Art 220**

(formerly Art 20abcd)

**Watercolor Painting II**

3 units; 2 hours lecture, 4 hours lab

*Prerequisite: Art 219 with a minimum grade of C**Credit, degree applicable**Transfer CSU, UC*

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

**Art 222**

(formerly Art 22ab)

**Fundamentals of Painting I**

3 units; 2 hours lecture, 4 hours lab

*Prerequisite: Art 110 with a minimum grade of C**Credit, degree applicable**Transfer CSU, UC*

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

**Art 223A**

(formerly Art 223)

***Fundamentals of Painting II***

3 units; 2 hours lecture, 4 hours lab

Prerequisite: Art 222 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

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

**Art 223B*****Fundamentals of Painting III***

3 units; 2 hours lecture, 4 hours lab

Prerequisite: Art 223A with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course provides directed research and critical analysis of painting while emphasizing increasingly more complex concepts, themes, and subject matter. Students are encouraged to pursue individual approaches through a combination of historical and contemporary styles. Also covered are techniques and processes necessary to complete a cohesive body of artwork that integrates research, methodology, and invention, and reflects a unified, self-directed visual theme.

**Art 224**

(formerly Art 24ab)

***Life Painting I***

3 units; 2 hours lecture, 4 hours lab

Prerequisite: Art 217 and Art 222 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

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

**Art 225**

(formerly Art 25abcd)

***Life Painting II***

3 units; 2 hours lecture, 4 hours lab

Prerequisite: Art 224 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course is a continuation of the techniques and aesthetic issues introduced in Life Painting I. Emphasis is placed on the interpretation of live-model poses, media manipulation, color, space, composition, and expression.

**Art 230**

(formerly Art 38abcd)

***Two-Dimensional Design II***

3 units; 2 hours lecture, 4 hours lab

Prerequisite: Art 130 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course is an expanded study of the elements and principles of two-dimensional design. Special emphasis is placed on pictorial interpretation, conceptual synthesis and graphic purpose. Experimental design strategies will be introduced including variation studies, research and production methods and electronic media applications.

**Art 231**

(formerly Art 42abcd)

***Lettering and Typography II***

3 units; 2 hours lecture, 4 hours lab

Prerequisite: Art 131 with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course continues the study of 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 232**

(formerly Art 40abcd)

***Advertising Design II***

3 units; 2 hours lecture, 4 hours lab

Prerequisite: Art 132 with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course is a continuation of Advertising Design I. Emphasis is placed on the development of a strong foundation for visualizing design problems and formulating their solutions as well as the correlation of form with content, function and context. Materials will be prepared for portfolio presentation.

**Art 233*****Graphic Design II***

3 units; 2 hours lecture, 4 hours lab

Prerequisite: Art 133 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course continues the study of the concepts and processes of graphic design. Problem-solving skills and the creative design process are emphasized through digital imaging, typography, identity design and page layout. Students will explore various problem-solving strategies using raster, vector graphics, and page layout software, as well as with traditional art and design media.

**Art 253**

(formerly Art 54abcd)

**Illustration II***3 units; 2 hours lecture, 4 hours lab**Prerequisite: Art 153 with a minimum grade of C**Credit, degree applicable**Transfer CSU*

This course is a continuation of the concepts and techniques presented in Illustration I. Increasingly more advanced illustration projects, techniques, concepts and methods will be presented. Emphasis is placed on the development of original concepts, the refinements of techniques and production methods, and the development and presentation of portfolio-quality art work.

**Art 262**

(formerly Art 62abcd)

**Intermediate Ceramics***3 units; 2 hours lecture, 4 hours lab**Prerequisite: Art 161 with a minimum grade of C**Credit, degree applicable**Transfer CSU, UC*

In this course, students will explore basic functional forms, surface decoration, glazing techniques, clays and clay bodies with an emphasis on the use of the potter's wheel. The history of Early American, Far East and Western European ceramics is also covered.

**Art 263**

(formerly Art 63abcd)

**Advanced Ceramics***3 units; 2 hours lecture, 4 hours lab**Prerequisite: Art 262 with a minimum grade of C**Credit, degree applicable**Transfer CSU, UC*

In this course, students will continue to explore functional forms and surface enrichment and experiment with glazing techniques. Highfire clays and glazes, kiln loading and the theory of firing will be introduced. A brief history of ceramics will be included.

**Art 274**

(formerly Art 74abcd)

**Jewelry Fabrication***3 units; 2 hours lecture, 4 hours lab**Prerequisite: Art 173 with a minimum grade of C**Credit, degree applicable**Transfer CSU*

In this intermediate course, students will develop design skills and concepts through individual projects in jewelry fabrication, surface embellishment, forming, stone setting, and tool making.

**Art 275**

(formerly Art 75abcd)

**Jewelry Casting***3 units; 2 hours lecture, 4 hours lab**Prerequisite: Art 173 with a minimum grade of C**Credit, degree applicable**Transfer CSU*

This course covers the casting process as it relates to the field of jewelry. Model making, lost wax casting, and mold making will be introduced. Design skills and concepts will be developed through individual projects.

**Art 282**

(formerly Art 82abcd)

**Life Sculpture***3 units; 2 hours lecture, 4 hours lab**Prerequisite: Art 217 or 160 or 161 or 181 with a minimum grade of C**Credit, degree applicable**Transfer CSU, UC*

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

**Art 283**

(formerly Art 83abcd)

**Bronze Casting***3 units; 2 hours lecture, 4 hours lab**Prerequisite: Art 160 or 161 or 173 or 181 with a minimum grade of C in prerequisite**Credit, degree applicable**Transfer CSU*

This course is an introduction to the aesthetics and processes used in the making of bronze sculpture. Topics include the elements of sculptural design, wax formulation and fabrication, the spruing process, the investing of wax patterns, mold making, finishing techniques, and bronze foundry procedures.

**Art 288**

(formerly Art 88abcd)

**Printmaking II – Etching and Relief***3 units; 2 hours lecture, 4 hours lab**Prerequisite: Art 187 with a minimum grade of C**Credit, degree applicable**Transfer CSU, UC*

This course continues the study of intaglio and relief printing at an intermediate level. Students will explore non-toxic methods for plate development and multicolor printing using digital and non-digital techniques.

**Art 289**

(formerly Art 89abcd)

**Lithography**

3 units; 2 hours lecture, 4 hours lab

Prerequisite: Art 187 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course covers the fundamental theories and practices involved in the development of graphic images based on lithographic techniques and processes with an emphasis on the unique qualities of the lithographic print, including color. Additional emphasis is placed on materials, techniques, tools, and craftsmanship relevant to fine art lithographic printmaking.

**Art 290****Screen Printing**

3 units; 2 hours lecture, 4 hours lab

Credit, degree applicable

Transfer CSU

This course is an introduction to non-toxic methods, materials, and techniques of screen printing. Emphasis is placed on single and multiple layer printing, digital and non-digital applications as well as single and multicolor printing (CMYK) techniques. Use of various substrates such as paper, vinyl, and fabric will also be covered.

**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 Astronomy Transfer Major**

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

**Astronomy 12****Astronomy Laboratory**

1 unit; 3 hours lab

Prerequisite: Astronomy 20 or Astronomy 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 13**

(formerly Astronomy 13abc)

**Astronomical Optics**

1 unit; 3 hours lab

Recommended Preparation: Astronomy 20 or Astronomy 25 with a minimum grade of B or equivalent; Mathematics 73 or 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: For this course, students will pay a minimum cost of \$250 for a completed telescope.

**Astronomy 20****The Solar System**

3 units; 3 hours lecture

Recommended Preparation: 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 20H***Honors The Solar System**3 units; 3 hours lecture**Recommended Preparation: eligibility for English 1A**Credit, degree applicable**Transfer CSU*

This honors course, intended for students in the Honors Transfer Program, is an introduction to the major planets and the smaller members of the solar system such as moons, asteroids, Kuiper Belt Objects, and comets. Theories of the origin and histories of the planets are presented. The early history of astronomy and the Copernican Revolution are discussed. Sky phenomena such as constellations, the seasons, eclipses, and planetary motions are demonstrated in the planetarium. The possibility of life elsewhere in the solar system is examined. Students in the honors sections are required to research and write comprehensively about the origin of the solar system.

*Note: Students may take either Astronomy 20 or Astronomy 20H.**Duplicate credit will not be awarded for Astronomy 20 and Astronomy 20H.***Astronomy 25***Stars and Galaxies**3 units; 3 hours lecture**Recommended Preparation: English 84**Credit, degree applicable**Transfer CSU, UC*

This course is an introduction to the universe and its history. The main focus is on our view of the heavens and how astronomers learn about stars and galaxies. The formation, life histories, and fates of different kinds of stars, including the sun, are examined. Exotic stars as well as black holes are explored. The structure and distribution of galaxies are discussed, with a focus on our own Milky Way Galaxy. The possibility of simple and intelligent life in the Milky Way Galaxy will be examined. The history of the universe, starting with the Big Bang is also investigated.

**Astronomy 99**

(formerly 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\**

This course provides the student an opportunity to explore research problems in Astronomy not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned laboratory work and/or research projects (54 hours per unit).

*\*Note: Transfer limitations apply.**Note: For eligibility requirements, go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)***AUTOMOTIVE COLLISION REPAIR/PAINTING****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 collision repair/painting program prepares students for employment in the field and provides upgrade opportunities for currently employed personnel. By completing the degree requirements, students will gain proficiency in industry repair standards, vehicle identification and construction, estimating, body repairs, frame repairs, vehicle alignment, welding, and vehicle painting. In addition, completing the certificate requirements prepares students for employment in the fields of automotive insurance investigation, vehicle accident reconstruction, automotive collision repair, or automotive painting. Competencies will be assessed regularly by student performance in the automotive collision repair/painting classroom and laboratory.

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

**Course Title****Complete a minimum of 20 units from:**

ACRP 1A	Introduction to Automotive Collision Repair (8)
ACRP 1B	Collision Repair Equipment and Welding Techniques (8)
ACRP 1C	Major Collision Analysis and Repair (8)
ACRP 1D	Automotive Component Systems Analysis and Repair (8)
ACRP 2A	Basic Automotive Painting – Refinishing (8)
ACRP 2B	Automotive Refinishing Materials and Equipment (8)
ACRP 2C	Automotive Refinishing Applications (8)
ACRP 3A	Introduction to Automotive Collision Estimating (8)
ACRP 4A	Beginning Automotive Collision Repair I (4)
ACRP 4B	Beginning Automotive Collision Repair II (4)
ACRP 5A	Beginning Automotive Painting I (4)
ACRP 5B	Beginning Automotive Painting II (4)
ACRP 20	Automotive Collision Investigation (3)
ACRP 22	Automotive Repair Fraud (3)
ACRP 24	Automotive Collision Analysis (3)
ACRP 26	Automotive Accident Reconstruction (3)

**Total Units: 20****Recommended Electives:**

ACRP 95	Cooperative Work Experience Education (2-4)
MTT 16	General Metals (3)
WELD 15	Basic Welding for Allied Fields (3)

**Certificates of Achievement**

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

**Automotive Collision Repair/Painting I Certificate of Achievement****Course Title**

*Complete a minimum of 32 units from:*

ACRP 1A	Introduction to Automotive Collision Repair (8)
ACRP 1B	Collision Repair Equipment and Welding Techniques (8)
ACRP 1C	Major Collision Analysis and Repair (8)
ACRP 1D	Automotive Component Systems Analysis and Repair (8)
ACRP 2A	Basic Automotive Painting – Refinishing (8)
ACRP 2B	Automotive Refinishing Materials and Equipment (8)
ACRP 2C	Automotive Refinishing Applications (8)
ACRP 3A	Introduction to Automotive Collision Estimating (8)
ACRP 4A	Beginning Automotive Collision Repair I (4)
ACRP 4B	Beginning Automotive Collision Repair II (4)
ACRP 5A	Beginning Automotive Painting I (4)
ACRP 5B	Beginning Automotive Painting II (4)
ACRP 20	Automotive Collision Investigation (3)
ACRP 22	Automotive Repair Fraud (3)
ACRP 24	Automotive Collision Analysis (3)
ACRP 26	Automotive Accident Reconstruction (3)

**Total Units: 32**

**Automotive Collision Repair/Painting II Certificate of Achievement****Course Title**

*Complete a minimum of 32 units from:*

ACRP 1A	Introduction to Automotive Collision Repair (8)
ACRP 1B	Collision Repair Equipment and Welding Techniques (8)
ACRP 1C	Major Collision Analysis and Repair (8)
ACRP 1D	Automotive Component Systems Analysis and Repair (8)
ACRP 2A	Basic Automotive Painting – Refinishing (8)
ACRP 2B	Automotive Refinishing Materials and Equipment (8)
ACRP 2C	Automotive Refinishing Applications (8)
ACRP 3A	Introduction to Automotive Collision Estimating (8)
ACRP 4A	Beginning Automotive Collision Repair I (4)
ACRP 4B	Beginning Automotive Collision Repair II (4)
ACRP 5A	Beginning Automotive Painting I (4)
ACRP 5B	Beginning Automotive Painting II (4)
ACRP 20	Automotive Collision Investigation (3)
ACRP 22	Automotive Repair Fraud (3)
ACRP 24	Automotive Collision Analysis (3)
ACRP 26	Automotive Accident Reconstruction (3)

*Complete 9-12 units from:*

English A	Writing the College Essay (3) or qualifying score for English 1A on English Placement Test
MTT 16	General Metals (3)
WELD 15	Basic Welding for Allied Fields (3)

**Total Units: 41-44**

**Certificates of Accomplishment**

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the requirements for the certificate must be completed at El Camino College.

**Automotive Collision Investigation Certificate of Accomplishment****Course Title**

ACRP 20	Automotive Collision Investigation (3)
ACRP 22	Automotive Repair Fraud (3)

**Total Units: 6**

**Automotive Accident Reconstruction Certificate of Accomplishment****Course Title**

ACRP 24	Automotive Collision Analysis (3)
ACRP 26	Automotive Accident Reconstruction (3)

**Total Units: 6**

For Gainful Employment program information, please visit [www.elcamino.edu/academics/indtech/autocollision](http://www.elcamino.edu/academics/indtech/autocollision)

**Automotive Collision Repair/Painting 1A***Introduction to Automotive Collision Repair**8 units; 3 hours lecture, 15 hours lab**Credit, degree applicable**Transfer CSU*

This course is designed to introduce students to automotive collision repair and provide an overview of the skills needed for employment in industry. Topics covered include safety practices, industry repair standards, repair theory, tool identification and use, vehicle construction, gas and electric welding, metal finishing, grinding, applying and shaping plastic filler and spraying primer.

*Note: The Automotive Collision Repair/Painting 1A is equivalent to Automotive Collision Repair/Painting 4A and 5A. Students who have completed Automotive Collision Repair/Painting 4A and 5A have met the 1A prerequisite requirement for 1B, 1C, 1D, 2A, 2B, and 2C.*

**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*

This course provides instruction on collision repair equipment and welding techniques involving safety practices, vehicle collision analysis and theory, vehicle disassembly procedures, and body component fit-up and alignment principles. The topics of replacing door skins, panel bonding, steel patch panel fabrication, weld-in panel replacement and aluminum panel repair are also covered. Equipment used includes Metal Inert Gas (MIG) and Squeeze-Type Resistance Spot Welders (STRSW), hydraulic jacks, pneumatic and other specialty tools.

**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 in full frame and unibody vehicle construction and damage types, locating and analyzing direct and indirect damage, planning a pull, setting up and using a frame rack with and without computerized measuring systems, and replacing structural parts and panels with Metal Inert Gas (MIG) and Squeeze-Type Resistance Spot Welders (STRSW). The topics of vehicle sectioning, structural glass, suspension components, front-end alignment, and damage estimating are also covered.

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

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**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 includes instruction in steering and suspension system parts and damage identification, wheel alignment, airbag deactivation and reactivation, hybrid/electric vehicle safety and interior upholstery and reconditioning. This course also provides instruction in correcting structural damage such as core support, center pillar damage and replacing front side members, structural glass replacement, aluminum and composite structural components, and restoring corrosion protection.

**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, Volatile Organic Compound (VOC) recording, surface identification, surface preparation, abrasives, metal conditioning, vehicle masking, primers, and spray equipment.

**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 5A or 5B with a minimum grade of C in prerequisite or equivalent**Credit, degree applicable**Transfer CSU*

This course provides instruction on the principles of automotive refinishing involving safety practices and equipment, air supply equipment, refinishing spray booth, spray equipment, undercoat materials, solvents, topcoat color systems, and paint application procedures.

*Note: Automotive Collision Repair/Painting 2B is equivalent to the two-course sequence Automotive Collision Repair/Painting 5C and 5D.*

**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 4A and 4B or 5A and 5B 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 4A***Beginning Automotive Collision Repair I*

4 units; 2 hours lecture, 7 hours lab

Credit, degree applicable

Transfer CSU

This course provides instruction in basic safety, tool identification and use, vehicle construction and parts nomenclature, small dent repair, plastics scratch and dent repair, mixing and application of primer, and estimating.

**Automotive Collision Repair/Painting 4B***Beginning Automotive Collision Repair II*

4 units; 2 hours lecture, 7 hours lab

Credit, degree applicable

Transfer CSU

This course provides instruction in automotive Metal Inert Gas (MIG) and Squeeze-Type Resistance Spot Welding (STRSW) and safety, automotive metals, metal finishing, large dent repair, corrosion protection, and vehicle disassembly and reassembly.

**Automotive Collision Repair/Painting 4C***Intermediate Automotive Collision Repair I*

4 units; 2 hours lecture, 7 hours lab

Credit, degree applicable

Transfer CSU

This course provides instruction in structural plastic repair, surface and structural repair of fiberglass and composites, aluminum repair and surface treatment for refinishing, vehicle frame and structural parts nomenclature, frame and unibody damage identification and measurement, structural damage estimating, and replacement panel fitment and alignment.

**Automotive Collision Repair/Painting 4D***Intermediate Automotive Collision Repair II*

4 units; 2 hours lecture, 7 hours lab

Credit, degree applicable

Transfer CSU

This course introduces students to frame straightening and severe collision damage using the frame rack, power post, damage dozer, hydraulic jacks, and porto-power. Students will also learn how to section a vehicle, replace damaged unibody structural panels, and prepare replaced panels for rustproofing/refinishing.

**Automotive Collision Repair/Painting 5A***Beginning Automotive Painting I*

4 units; 2 hours lecture, 7 hours lab

Credit, degree applicable

Transfer CSU

This course provides instruction in personal safety, environmental laws, introduction to surface preparation, mixing ratios, spray booth use, spray gun adjustment, use and cleaning, priming and painting vehicle parts and panels, and color sanding and buffing.

**Automotive Collision Repair/Painting 5B***Beginning Automotive Painting II*

4 units; 2 hours lecture, 7 hours lab

Credit, degree applicable

Transfer CSU

This course provides instruction in vehicle disassembly for refinishing, surface preparation of unpainted surfaces, specialty undercoats and corrosion protection, plastics refinishing, and painting parts and complete cars.

**Automotive Collision Repair/Painting 5C***Intermediate Automotive Refinishing I*

4 units; 2 hours lecture, 7 hours lab

Credit, degree applicable

Transfer CSU

In this course, students will learn refinishing repair standards and how to write an estimate for refinishing. Students will learn how to identify and correct paint flaws, choose color variants, retrieve and mix paint formulas, adjust paint for color match, and perform panel blends and spot repairs. Students will also learn how to mask panels for blending and how to refinish composite materials such as fiberglass and carbon fiber.

**Automotive Collision Repair/Painting 5D***Intermediate Automotive Refinishing II*

4 units; 2 hours lecture, 7 hours lab

Credit, degree applicable

Transfer CSU

In this course, students will improve their production painting skills by learning how to control their painting environment through spray booth controls, temperature and humidity control, paint additives and gun adjustment. Students will also learn how to apply tri-coat paints, flat paints, truck bedliner, and interior paints.

**Automotive Collision Repair/Painting 6**

(formerly Automotive Collision Repair/Painting 6abcd)

*Automotive Collision Repair for Non-Majors*

2 units; 1 hour lecture, 3 hours lab

Credit, degree applicable

Transfer CSU

This course is designed to provide students with a brief, hands-on introduction to all facets of automotive collision repair. Topics include safety practices, customer rights and the collision repair process, auto parts nomenclature, dent removal, plastic repair, filler application and shaping, priming, painting and detailing.

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

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**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 tire marks, the coefficient of friction, and speed from skid formulas.

**Automotive Collision Repair/Painting 22****Automotive Repair Fraud**

3 units; 3 hours lecture

Recommended Preparation: Automotive Collision Repair/Painting 20

Credit, degree applicable

Transfer CSU

This course covers the elements of fraud encountered in the automotive repair industry and is designed to prepare students for employment in the fields of automotive collision repair, automotive insurance investigation, and accident reconstruction. Topics include fraud detection, investigation procedures and collection of evidence related to staged traffic accidents, Vehicle Identification Number (VIN) fraud, and auto insurance fraud.

**Automotive Collision Repair/Painting 24****Automotive Collision Analysis**

3 units; 3 hours lecture

Credit, degree applicable

Transfer CSU

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

**Automotive Collision Repair/Painting 26****Automotive Accident Reconstruction**

3 units; 3 hours lecture

Recommended Preparation: Automotive Collision Repair/Painting 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 95**

(formerly 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\*

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Automotive Collision Repair/Painting field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

\*Note: Transfer limitations apply.

Note: The total units earned for Cooperative Work Experience Education may not exceed 16 units.

**Automotive Collision Repair/Painting 99**

(formerly 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\*

This course provides special advanced studies in a subject field of Automotive Collision Repair/Painting not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Automotive Collision Repair/Painting projects (54 hours per unit).

\*Note: Transfer limitations apply.

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.

#### Course Title

**Required Core: 32 units:**

**8 units from:**

ATEC 11	Brakes, Suspension and Four Wheel Alignment (8)
ATEC 14	Brakes (4)
ATEC 16	Suspension and Four Wheel Alignment (4)

**8 units from:**

ATEC 22A	Introduction to Tune-Up, Electrical and Fuel Systems (8)
ATEC 23	Major Tune-Up and Emission Controls (4)
ATEC 24	Fuel Systems and Emissions (4)

**8 units from:**

ATEC 22B	Advanced Tune-Up, Electrical and Fuel Systems (8)
ATEC 25	Automotive Electrical Systems (4)
ATEC 26	Automotive Testing and Diagnosis (4)

**8 units from:**

ATEC 33	Transmissions, Drive Train and Drive Axles (8)
ATEC 34	Automatic Transmissions (4)
ATEC 35	Manual Transmission, Drive Train and Drive Axles (4)

**one course from:**

ATEC 41	Engine Rebuilding (8)
ATEC 42	Engine Repair (8)
ATEC 43	Introduction to Engine Repair (4)
ATEC 45	Automotive Machining (4)

**Total Units: 36-40**

**Recommended Elective:**

WELD 15	Basic Welding for Allied Fields (3)
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### Preparation for the Automotive Technology Transfer Major

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

### Certificates of Achievement

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

### Automotive Brakes/Suspension Transmission/ Drive Train Technician Certificate of Achievement

#### Course Title

**8 units from:**

ATEC 11	Brakes, Suspension and Four Wheel Alignment (8)
ATEC 14	Brakes (4)
ATEC 16	Suspension and Four Wheel Alignment (4)

**8 units from:**

ATEC 33	Transmissions, Drive Train and Drive Axles (8)
ATEC 34	Automatic Transmissions (4)
ATEC 35	Manual Transmission, Drive Train and Drive Axles (4)

**Total Units: 16**

### Automotive Engine Rebuilding/Repair Technician Certificate of Achievement

#### Course Title

**8 units from:**

ATEC 41	Engine Rebuilding (8)
ATEC 42	Engine Repair (8)

**4 units from:**

ATEC 43	Introduction to Engine Repair (4)
ATEC 45	Automotive Machining (4)

**Total Units: 12**

### Automotive Technician I Certificate of Achievement

Course	Title
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*Required Core: 32 units*

**8 units from:**

ATEC 11	Brakes, Suspension and Four Wheel Alignment (8)
ATEC 14	Brakes (4)
ATEC 16	Suspension and Four Wheel Alignment (4)

**8 units from:**

ATEC 22A	Introduction to Tune-Up, Electrical and Fuel Systems (8)
ATEC 23	Major Tune-Up and Emission Controls (4)
ATEC 24	Fuel Systems and Emissions (4)

**8 units from:**

ATEC 22B	Advanced Tune-Up, Electrical and Fuel Systems (8)
ATEC 25	Automotive Electrical Systems (4)
ATEC 26	Automotive Testing and Diagnosis (4)

**8 units from:**

ATEC 33	Transmissions, Drive Train and Drive Axles (8)
ATEC 34	Automatic Transmissions (4)
ATEC 35	Manual Transmission, Drive Train and Drive Axles (4)

**one course from:**

ATEC 41	Engine Rebuilding (8)
ATEC 42	Engine Repair (8)
ATEC 43	Introduction to Engine Repair (4)
ATEC 45	Automotive Machining (4)

**Total Units: 36-40**

### Automotive Technician II Certificate of Achievement

Course	Title
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*Required Core: 32 units*

**8 units from:**

ATEC 11	Brakes, Suspension and Four Wheel Alignment (8)
ATEC 14	Brakes (4)
ATEC 16	Suspension and Four Wheel Alignment (4)

**8 units from:**

ATEC 22A	Introduction to Tune-Up, Electrical and Fuel Systems (8)
ATEC 23	Major Tune-Up and Emission Controls (4)
ATEC 24	Fuel Systems and Emissions (4)

**8 units from:**

ATEC 22B	Advanced Tune-Up, Electrical and Fuel Systems (8)
ATEC 25	Automotive Electrical Systems (4)
ATEC 26	Automotive Testing and Diagnosis (4)

**8 units from:**

ATEC 33	Transmissions, Drive Train and Drive Axles (8)
ATEC 34	Automatic Transmissions (4)
ATEC 35	Manual Transmission, Drive Train and Drive Axles (4)

**one course from:**

ATEC 41	Engine Rebuilding (8)
ATEC 42	Engine Repair (8)
ATEC 43	Introduction to Engine Repair (4)
ATEC 45	Automotive Machining (4)

**Complete 6-10 units from:**

ENGL A	Writing the College Essay (3) or qualifying score for English 1A on the English Placement Test
MTT 46	Basic Machine Tool Operation (3)
MTT 101	Introduction to Conventional and CNC Machining (4)
WELD 15	Basic Welding for Allied Fields (3)

**Total Units: 42-50**

### Automotive Tune-Up Technician Certificate of Achievement

Course	Title
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**8 units from:**

ATEC 22A	Introduction to Tune-Up, Electrical and Fuel Systems (8)
ATEC 23	Major Tune-Up and Emission Controls (4)
ATEC 24	Fuel Systems and Emissions (4)

**8 units from:**

ATEC 22B	Advanced Tune-Up, Electrical and Fuel Systems (8)
ATEC 25	Automotive Electrical Systems (4)
ATEC 26	Automotive Testing and Diagnosis (4)

**Total Units: 16**

### Certificates of Accomplishment

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

### Automotive Air Conditioning Technician Certificate of Accomplishment

Course	Title
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ATEC 81	Automotive Air Conditioning (3)
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**Total Units: 3**

**Automotive Brakes and Suspension Technician Certificate of Accomplishment****Course Title****8 units from:**

ATEC 11	Brakes, Suspension and Four Wheel Alignment (8)
ATEC 14	Brakes (4)
ATEC 16	Suspension and Four Wheel Alignment (4)

**Total Units: 8****Automotive Engine Rebuilding and Repair Technician Certificate of Accomplishment****Course Title****8 units from:**

ATEC 41	Engine Rebuilding (8)
ATEC 42	Engine Repair (8)
ATEC 43	Introduction to Engine Repair (4)
ATEC 45	Automotive Machining (4)

**Total Units: 8****Automotive Transmission and Drive Train Technician Certificate of Accomplishment****Course Title****8 units from:**

ATEC 33	Transmissions, Drive Train and Drive Axles (8)
ATEC 34	Automatic Transmissions (4)
ATEC 35	Manual Transmission, Drive Train and Drive Axles (4)

**Total Units: 8**

For Gainful Employment program information, please visit [www.elcamino.edu/academics/indtech/autotech](http://www.elcamino.edu/academics/indtech/autotech)

**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.

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

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**Automotive Technology 11****Brakes, Suspension and Four Wheel Alignment***8 units; 5 hours lecture, 10 hours lab**Recommended Preparation: Automotive Technology 1 or equivalent**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, theory, and application of minor engine tune-up, electrical and fuel systems. Laboratory activities stress the proper use of test equipment utilized in the automotive field.

**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 automotive field.

*Note: This course is equivalent to 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 1 or equivalent**Credit, degree applicable**Transfer CSU*

This course covers the study of major engine tune-up service and testing of emission control systems. Laboratory activities stress the proper use of test equipment utilized in the automotive field.

*Note: The two-course sequence Automotive Technology 23 and 24 is equivalent to 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 equivalent to 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****Transmissions, Drive Train and Drive Axles**

8 units; 5 hours lecture, 10 hours lab

*Recommended Preparation: Automotive Technology 1 or equivalent skills**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 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 collecting data, resulting in accurate diagnosis, repair, and service.

**Automotive Technology 95***(formerly 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\**

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Automotive Technology field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

*\*Note: Transfer limitations apply.*

*Note: The total units earned for Cooperative Work Experience Education may not exceed 16 units.*

**Automotive Technology 99***(formerly 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\**

This course provides special advanced studies in a subject field of Automotive Technology not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Automotive Technology projects (54 hours per unit).

*\*Note: Transfer limitations apply.*

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

## 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 Biology Transfer Major

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

### 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.

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

### Biology 10H

#### *Honors Fundamentals of Biology*

4 units; 3 hours lecture, 3 hours lab

Recommended Preparation: eligibility for English 1A

Credit, degree applicable

Transfer CSU

This honors course is designed for students in the Honors Transfer Program. This course is a survey of all living things: prokaryotes, protists, fungi, plants, and animals. Basic principles of structure, function, and relationships of living organisms are discussed with special reference to humans. This course is enriched through writing assignments that involve research and analysis.

Note: Students may take either Biology 10 or Biology 10H. Duplicate credit will not be awarded for Biology 10 and Biology 10H.

### 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: 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: English 82

Credit, degree applicable

Transfer CSU, UC

Basic ecological and biological principles and concepts are emphasized in the study of the structure and function of ecosystems. Major ecological problems such as 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 1A  
Credit, degree applicable

Transfer CSU, UC

This is a survey course in insect biology, taxonomy, physiology, and ecology, and considers the methods and economic importance of controlling insect populations. Major insect orders and families are introduced through lecture with slides and live and preserved specimens. Emphasis is placed on learning how to identify insect specimens in the laboratory and to recognize them in the field. Field trips to local sites, local desert and coastal mountain habitats will be taken to practice collection, preparation, and recognition techniques.

**Biology 17****Marine Biology**

3 units; 3 hours lecture

Recommended Preparation: eligibility for English 1A  
Credit, degree applicable

Transfer CSU, UC

This is an introductory marine biology lecture course exploring biological principles of structure, function and adaptation for marine life. It includes a review of the history of marine biology and a discussion of local species of marine plants and animals and major marine communities. Human interaction and impact on the ocean is also discussed.

**Biology 18****Marine Biology Laboratory**

1 unit; 3 hours lab

Prerequisite: Biology 17 with a minimum grade of C or concurrent enrollment

Recommended Preparation: eligibility for English 84  
Credit, degree applicable

Transfer CSU, UC

This is an introductory marine biology laboratory course designed to complement the marine biology lecture course. The laboratory course will explore the animals and plants living in the ocean and their structure and adaptations for a marine environment. Local species will be identified and classified and local aquariums will be visited.

**Biology 99**

(formerly 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 acknowledgment by the instructor with whom the student will work

Credit, degree applicable

Transfer CSU\*

This course provides special advanced studies in a subject field of Biology not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Biology projects (54 hours per unit).

\*Note: Transfer limitations apply.

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 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.

**Biology 102****Principles of Biology II**

5 units; 3 hours lecture, 6 hours lab

Prerequisite: Chemistry 1A with minimum grade of C or 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****Fundamentals of Molecular Biology**

3 units; 3 hours lecture

Prerequisite: Biology 101 and Biology 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.

## Biotechnology

### Biotechnology 1

*Basic Techniques of Biological Technology*

2.5 units; 1 hour lecture, 5 hours lab

*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

*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.

**Preparation for the Business Transfer Major**

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

**Business Administration Major**

Students who intend to complete a four-year baccalaureate program in Business Administration should complete the lower division requirements of the college of their choice. See a counselor for more specific information.

**Accounting Major**

Course	Title
BUS 1A	Financial Accounting (4)
BUS 1B	Managerial Accounting (4)
BUS 2A	Intermediate Accounting (3)
BUS 2B	Intermediate Accounting (3)
BUS 4	Cost Accounting (3)
BUS 5A	Income Tax Accounting (4)
CIS 13	Computer Information Systems (3)
LAW 5	Business Law (3)

**Total Units: 27****Certificate of Achievement**

A Certificate of Achievement in Accounting will be granted upon completion of all program requirements. At least 15 units of the certificate requirements must be completed at El Camino College.

**Accounting Certificate of Achievement**

Course	Title
BUS 1A	Financial Accounting (4)
BUS 1B	Managerial Accounting (4)
BUS 2A	Intermediate Accounting (3)
BUS 2B	Intermediate Accounting (3)
BUS 4	Cost Accounting (3)
BUS 5A	Income Tax Accounting (4)
CIS 13	Computer Information Systems (3)
LAW 5	Business Law (3)

**Total Units: 27****Business Management Major**

A minimum of 12 units must be completed at El Camino College.

Course	Title
BUS 1A	Financial Accounting (4)
or	
BUS 11	Accounting for Small Business (3)
BUS 20	Business Management (3)
BUS 21	Human Resources Management (3)
BUS 22	Human Relations in Organizations (3)
BUS 25	Introduction to Business (3)
BUS 28	Written Business Communications (3)
BUS 29	Oral Business Communications (3)
LAW 5	Business Law (3)
CIS 13	Computer Information Systems (3)

**Total Units: 27-28****Recommended Electives:**

BUS 1B	Managerial Accounting (4)
BUS 17	Personal Finance (3)
BUS 19	Principles of Retailing Management (3)

**Certificates of Achievement - Business Management**

A Certificate of Achievement in Business Management will be granted upon completion of all program requirements.

**Business Management Certificate of Achievement**

Course	Title
BUS 20	Business Management (3)
BUS 21	Human Resources Management (3)
BUS 22	Human Relations in Organizations (3)
BUS 25	Introduction to Business (3)
BUS 28	Written Business Communications (3)
BUS 29	Oral Business Communications (3)

**Total Units: 18**

A Certificate of Achievement in Retail Management will be granted upon completion of all program requirements. A minimum of 12 units must be completed at El Camino College.

### Retail Management Certificate of Achievement

Course	Title
BUS 1A	Financial Accounting (4)
or	
BUS 11	Accounting for Small Business (3)
and	
BUS 14	Marketing (3)
BUS 19	Principles of Retailing Management (3)
BUS 20	Business Management (3)
BUS 21	Human Resources Management (3)
BUS 22	Human Relations in Organizations (3)
BUS 28	Written Business Communications (3)
CIS 13	Computer Information Systems (3)

**Total Units: 24-25**

### Marketing Major

A minimum of 12 units must be completed at El Camino College.

Course	Title
BUS 1A	Financial Accounting (4)
or	
BUS 11	Accounting for Small Business (3)
BUS 12	Advertising (3)
or	
BUS 24	Small Business Entrepreneurship (3)
and	
BUS 14	Marketing (3)
BUS 22	Human Relations in Organizations (3)
BUS 25	Introduction to Business (3)
BUS 27	Effective English for Business (3)
or	
BUS 28	Written Business Communications (3)
and	
BUS 29	Oral Business Communications (3)
LAW 5	Business Law (3)

**Total Units: 24-25**

### Recommended Electives:

BUS 17	Personal Finance (3)
BUS 20	Business Management (3)
BUS 21	Human Resources Management (3)
CIS 13	Computer Information Systems (3)

### Certificate of Achievement

A Certificate of Achievement in Marketing will be granted upon the completion of all program requirements. A minimum of 12 units must be completed at El Camino College. Students who anticipate employment with large businesses are advised to take Business 12. Those interested in smaller enterprises should complete Business 24.

### Marketing Certificate of Achievement

Course	Title
BUS 1A	Financial Accounting (4)
or	
BUS 11	Accounting for Small Business (3)
BUS 12	Advertising (3)
or	
BUS 24	Small Business Entrepreneurship (3)
and	
BUS 14	Marketing (3)
BUS 22	Human Relations in Organizations (3)
BUS 25	Introduction to Business (3)
BUS 27	Effective English for Business (3)
or	
BUS 28	Written Business Communications (3)
and	
BUS 29	Oral Business Communications (3)
LAW 5	Business Law (3)

**Total Units: 24-25**

### Office Administration Major

18 units of the major requirements must be completed at El Camino College.

### Office Systems Option:

Course	Title
<b>Required Core: 23 units</b>	
BUS 27	Effective English for Business (3)
BUS 28	Written Business Communications (3)
BUS 40	Career Planning (2)
BUS 41	Records/Information Management (2)
BUS 43	Business Office Administration (3)
BUS 52A	Microsoft Word Applications I (2)
BUS 52B	Microsoft Word Applications II (2)
BUS 60A	Microcomputer Keyboarding (1)
BUS 60B	Microcomputer Document Processing (1)
BUS 60C	Microcomputer Document Formatting (1)
CIS 13	Computer Information Systems (3)
<b>3 units from:</b>	
CIS 26	Using Microsoft Excel (3)
CIS 28	Database Management using Microsoft Access (3)

**Total Units: 26**

**Management Option:****Course Title****Required Core: 20 units**

BUS 22	Human Relations in Organizations (3)
BUS 27	Effective English for Business (3)
BUS 28	Written Business Communications (3)
BUS 29	Oral Business Communications (3)
BUS 41	Records/Information Management (2)
BUS 43	Business Office Administration (3)
CIS 13	Computer Information Systems (3)

**9-10 units from:**

BUS 1A	Financial Accounting (4)
or	
BUS 11	Accounting for Small Business (3)
and	
BUS 20	Business Management (3)
BUS 25	Introduction to Business (3)

**Total Units: 29-30****Certificate of Achievement - Office Administration**

A Certificate of Achievement will be granted upon completion of all program requirements. A minimum of 11 units must be completed at El Camino College. All units must be completed within five years of the date of issue of the certificate. Students who have questions regarding this requirement should contact the Counseling Division or Evaluations Unit for a waiver petition.

**Office Applications Specialist Certificate of Achievement****Course Title**

BUS 27	Effective English for Business (3)
BUS 29	Oral Business Communications (3)
BUS 40	Career Planning (2)
BUS 43	Business Office Administration (3)
BUS 52A	Microsoft Word Applications I (2)
BUS 52B	Microsoft Word Applications II (2)
BUS 60C	Microcomputer Document Formatting (1)
CIS 13	Computer Information Systems (3)

**Total Units: 19**

For Gainful Employment program information for the Business program options offered at El Camino College, please visit the following links:

[www.elcamino.edu/academics/business/accounting](http://www.elcamino.edu/academics/business/accounting)  
[www.elcamino.edu/academics/business/businessmgmt](http://www.elcamino.edu/academics/business/businessmgmt)  
[www.elcamino.edu/academics/business/marketing](http://www.elcamino.edu/academics/business/marketing)  
[www.elcamino.edu/academics/business/officeadmin](http://www.elcamino.edu/academics/business/officeadmin)

**BUSINESS ADMINISTRATION****AS-T Degree****Business Division**

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

The business administration program is designed to provide students with a foundation in basic accounting principles, business law, and macroeconomics and microeconomics theory. Students will be able to apply methodologies to assess fiscal and monetary policy in the marketplace and understand the basics of contract law. A degree in business offers students a wide variety of entry-level career opportunities in accounting, management, marketing, and office administration. Upon successful completion of the program, students will be prepared for entry-level careers and transfer to major in Business Administration. Competencies will be assessed through examination and projects.

The Associate in Science in Business Administration for Transfer (AS-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AS-T are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AS-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AS-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AS-T.

**Course Title****Required Core: 17-18 units**

BUS 1A	Financial Accounting (4)
BUS 1B	Managerial Accounting (4)
ECON 1	Principles of Economics: Macroeconomics (3)
ECON 2	Principles of Economics: Microeconomics Theory (3)
LAW 4	Legal Environment of Business (4)
or	
LAW 5	Business Law (3)

**List A (select one): 4-5 units**

MATH 140	Finite Mathematics for Business and Social Sciences (4)
MATH 150	Elementary Statistics with Probability (4)
MATH 160	Calculus I for the Biological, Management and Social Sciences (4)
or	
MATH 165	Calculus for Business and Social Sciences (5)
or	
MATH 190	Single Variable Calculus and Analytic Geometry I (5)

**List B (select two): 6-7 units**

CIS 13	Computer Information Systems (3)
BUS 25	Introduction to Business (3)
or	
BUS 28	Written Business Communications (3)
or	
Any 4 unit Mathematics course from List A not already completed	

**Total Units: 27-30****Business 1A****Financial Accounting***4 units; 4 hours lecture, 1 hour lab**Recommended Preparation: eligibility for English 1A**Credit, degree applicable**Transfer CSU\*, UC*

This is an introductory course covering the fundamental theory, principles, and procedures of financial accounting with an emphasis on the corporate entity. Topics include ethics and the analysis, recording, and summarizing of accounting transactions on the accrual basis. Financial statements are prepared and analyzed. An emphasis will be on accounting as an information system to meet the demands of users for decision-making. Computer applications are integrated into the homework.

*Note: Transfer limitations apply.***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\*, UC*

This course emphasizes advanced accounting theory, principles and practices for the corporation form of ownership. A major focus of the course is on managerial, cost, and manufacturing accounting and related issues in the corporate environment.

*Note: Transfer limitations apply.***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 pass/no pass 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 pass/no pass option.***Business 11*****Accounting for Small Business****3 units; 3 hours lecture**Recommended Preparation: eligibility for English 84**Credit, degree applicable**Transfer CSU*

This course includes basic accounting procedures, preparation and analysis of financial statements, banking, payroll processes, and special accounting journals. This is an accounting course for small business in service and retail environments.

*Note: This course is not open to students who have credit for or are currently enrolled in Business 1A. Not recommended for the student who has completed two years of high school bookkeeping with a grade of C or better.***Business 12*****Advertising****3 units; 3 hours lecture**Recommended Preparation: eligibility for English 84 and eligibility for English A**Credit, degree applicable**Transfer CSU*

In this course, students will study how to create effective and compelling advertising campaigns through print, broadcast, and electronic media. Topics to be covered include the branding, message creation, and media placement. Also emphasized are the concepts of ethics, social responsibility, and consumer benefits.

**Business 14*****Marketing****3 units; 3 hours lecture**Recommended Preparation: eligibility for English 84 and eligibility for English A**Credit, degree applicable**Transfer CSU*

This course is an introduction to marketing principles and explores marketing concepts and strategies. Topics include market analysis, planning, product development, marketing mix, and media decisions. Electronic marketing and the environmental factors of marketing including social, ethical, and legal considerations are also studied.

*Note: Letter grade or pass/no pass option.***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, fractions, decimals, percents, bank reconciliation, use of business formulas and equations, payroll, discounts, and markup/markdowns, simple and compound interest, present values analysis, annuities and sinking funds, credit, depreciation and inventory, payroll taxes, promissory notes, insurance, financial reports, and business statistics.

*Note: Letter grade or pass/no pass option.***Business 17*****Personal Finance****3 units; 3 hours lecture**Recommended Preparation: eligibility for English 84 and eligibility for English A**Credit, degree applicable**Transfer CSU*

In this course, students will learn how to develop personal financial goals and how to use financial planning to help achieve life goals. Students will learn budgeting, planning for the financial future, and how to incorporate investment choices such as stocks, real estate, bonds, and mutual funds. Students will examine how personal financial management can affect physiological and psychological well-being and the impact financial management and decisions have on individuals and families.

*Note: Letter grade or pass/no pass 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 19*****Principles of Retailing Management****3 units; 3 hours lecture**Recommended Preparation: eligibility for English 84 and eligibility for English A**Credit, degree applicable**Transfer CSU*

This course examines the principles and practices used in the management of successful retail stores. Topics include site selection, layout, merchandising, staffing, positioning, customer service, promotional techniques, and all aspects of the critical buying function.

*Note: Letter grade or pass/no pass option.***Business 20*****Business Management****3 units; 3 hours lecture**Recommended Preparation: eligibility for English 84 and eligibility for English A**Credit, degree applicable**Transfer CSU*

This course is a study of the concepts and procedures critical to managing a business successfully in a global, competitive environment. Planning, organizing, leading, controlling, and the application of managerial concepts are discussed.

*Note: Letter grade or pass/no pass option.***Business 21*****Human Resources Management****3 units; 3 hours lecture**Recommended Preparation: eligibility for English 84 and eligibility for English A**Credit, degree applicable**Transfer CSU*

This course is a study of effective utilization of human resources within an organization. Emphasis is placed on principles of human resources strategy and planning, recruitment, selection, training and development, employee appraisals, compensation and benefits, legal considerations, organized labor, and health and safety practices. Effective management of common issues in human resources from the perspective of the employee and employer are discussed.

**Business 22*****Human Relations in Organizations****3 units; 3 hours lecture**Recommended Preparation: English 82 and English B**Credit, degree applicable**Transfer CSU*

This course covers the major themes of human relations in organizations and the workplace from a psychological, sociological, and physiological perspective. Students will develop critical thinking and ethical reasoning skills as students apply behavior science theories and principles. Topics include values, perception, motivation, conflict management, teamwork, and leadership.

**Business 24*****Small Business Entrepreneurship****3 units; 3 hours lecture**Recommended Preparation: eligibility for English 84 and eligibility for English A**Credit, degree applicable**Transfer CSU*

This course provides students with the ability to identify opportunities and develop them into viable small businesses or non-profit organizations. Students will focus on building the entrepreneurial skills needed to initiate and manage a small business or small organization. Areas of concentration include product development, acquiring financing, drafting a business plan, advertising, accounting, legal forms of organizations, and strategic planning.

*Note: Letter grade or pass/no pass option.***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 multicultural and globalized environment.

*Note: Letter grade or pass/no pass option.***Business 27*****Effective English for Business****3 units; 3 hours lecture**Prerequisite: eligibility for English 1A**Credit, degree applicable**Transfer CSU*

This course is a study of written English skills that are critical to communicate successfully in a business environment. Focus is placed on English grammar, usage, and sentence structure.

**Business 28*****Written Business Communications****3 units; 3 hours lecture**Prerequisite: English 1A with a minimum grade of C**Credit, degree applicable**Transfer CSU*

In this course, students will study the theory and practice of functional writing to 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: Business 29 is the same course as Supervision 27.*

**Business 40****Career Planning***2 units; 2 hours lecture**Recommended Preparation: English C**Credit, degree applicable**Transfer CSU*

This course will introduce students to personal career planning concepts. Through course readings and activities, students will learn how to identify employment trends in the marketplace, gain perspective on employer hiring practices, and develop an understanding of application processes. Students will write and refine their personal marketing materials in the forms of resume, cover letter, social media, and other correspondence. Emphasis will be placed on getting an interview, understanding typical interview processes, and developing conversational interview skills.

**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 course is only offered in the spring semester.*

**Business 43****Business Office Administration***3 units; 3 hours lecture**Recommended Preparation: Business 60A or concurrent enrollment or the ability to keyboard by touch and English B**Credit, degree applicable**Transfer CSU*

This course is designed to develop an understanding of business from the perspective of the office environment. Consideration is given to key aspects of typical administrative activities within the workplace including customer service, communications, records management, business ethics, and personal advancement. In addition, students are introduced to critical skills such as telephone communications, business meetings and presentations, and managing the workflow.

*Note: This course is only offered in the fall semester.*

**Business 52A****Microsoft Word Applications I***2 units; 1 hour lecture, 2 hours lab**Recommended Preparation: English 82 and Business 60A**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, text boxes, borders, and shading; and create tables and charts.

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

**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. Students will develop the fundamental computer skills necessary to input information efficiently and accurately.

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

**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 such as correspondence, reports, and tables and will build touch skill in speed and accuracy. This course is recommended for students who need to develop speed and accuracy skill as well as document formatting proficiency for personal or business use.

Note: Letter grade or pass/no pass option.

**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 pass/no pass option.

**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\*

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: Transfer limitations apply.

Note: The total units earned for Cooperative Work Experience Education 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\*

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: Transfer limitations apply.

Note: The total units earned for Cooperative Work Experience Education 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\*

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: Transfer limitations apply.

Note: The total units earned for Cooperative Work Experience Education 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\*

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: Transfer limitations apply.

Note: The total units earned for Cooperative Work Experience Education 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\**

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: Transfer limitations apply.**Note: The total units earned for Cooperative Work Experience Education may not exceed 16 units.***Business 99**

(formerly Business 99abc)

**Independent Study***1-3 units; hours to be arranged**Enrollment Limitation: two courses in Business with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work**Credit, degree applicable**Transfer CSU\**

This course provides special advanced studies in a subject field of Business not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Business projects (54 hours per unit).

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

## Cabinet Making

### See Construction Technology

## Chemistry Courses

Generally used for allied health majors (Nursing, Radiologic Technology) or to complete general education requirements.\*

**Chemistry 20**  
Fundamentals of Chemistry  
5 units  
Prerequisite - Math 40 or Math 43  
or qualification by testing  
(ECC Math Placement Test)

**Chemistry 21A**  
Survey of General and  
Organic Chemistry  
4 units  
Prerequisite - Eligibility for  
Math 80



**Chemistry 21B**  
Survey of Organic and  
Biochemistry  
4 units  
Prerequisite - Chemistry 21A  
with a minimum grade of C

Generally used for life science, physical science, and engineering majors.\*

**Chemistry 4**  
Beginning Chemistry  
5 units  
Prerequisite - Math 80 or equivalent  
or qualification by testing  
(ECC Math Placement Test)



**Chemistry 1A**  
General Chemistry I  
5 units  
Prerequisite - Eligibility for Math  
170 or qualification by testing -  
(ECC Math Placement Test),  
Chemistry 4 or  
(1 year of high school Chemistry  
AND qualification by testing)  
(ECC Chemistry Placement Test)



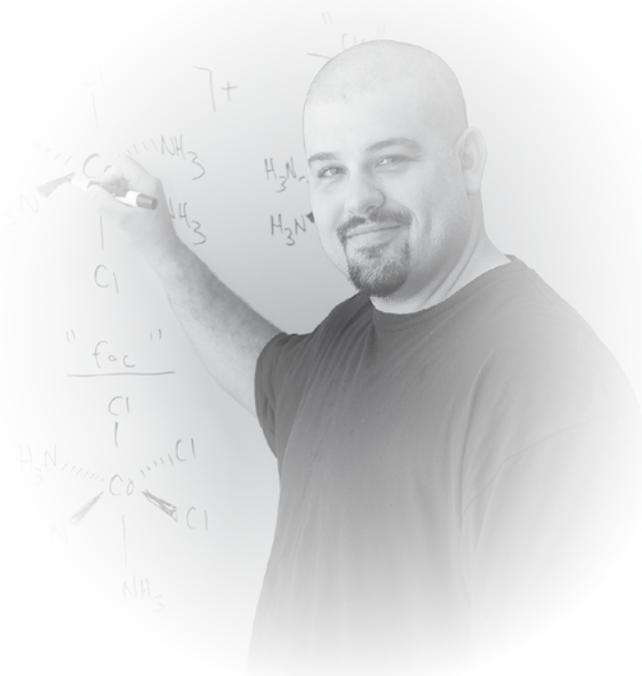
**Chemistry 1B**  
General Chemistry II  
5 units  
Prerequisite - Chemistry 1A



**Chemistry 7A**  
Organic Chemistry I  
5 units  
Prerequisite - Chemistry 1B



**Chemistry 7B**  
Organic Chemistry II  
5 units  
Prerequisite - Chemistry 7A



\*For specific requirements, please consult with an ECC Counselor or [www.assist.org](http://www.assist.org)

## 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 Chemistry Transfer Major

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

### Chemistry 4

#### Beginning Chemistry

5 units; 5 hours lecture, 4 hours lab

*Prerequisite:* Mathematics 80 with a minimum grade of C or equivalent or qualification by testing (El Camino College Mathematics Placement Test) and assessment

*Recommended Preparation:* eligibility for English 1A

*Credit, degree applicable*

*Transfer CSU, UC\**

This course introduces the principles of chemistry, modern concepts of atomic structure and periodicity as a basis for understanding bonding, chemical formulas, chemical equations and chemical reactions, states of matter, important elements and their compounds, solutions, acid-base theories and reactions, net ionic equations, oxidation-reduction, kinetics and chemical equilibrium, chemical nomenclature and calculations. In the laboratory, emphasis is on observations, measurements, and elementary quantitative experiments with an introduction to qualitative analysis.

*\*Note: The maximum UC credit allowed for students completing Chemistry 4 and 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 or qualification by testing (El Camino College Mathematics Placement Test) and assessment

*Credit, degree applicable*

*Transfer CSU, UC*

This course details fundamental theory and principles of atomic and molecular structure, physical states and chemical reactions. Included is the study of elements, compounds, periodic relationships, bonding, acids and bases, oxidation-reduction, energy, solutions, electrolytes and chemical equations. Descriptive chemistry of water and selected nonmetals including hydrogen, oxygen and carbon is presented.

### Chemistry 1B

#### General Chemistry II

5 units; 5 hours lecture, 4 hours lab

*Prerequisite:* Chemistry 1A with a minimum grade of C

*Credit, degree applicable*

*Transfer CSU, UC*

This course details the chemistry of elements and their compounds in periodic groupings, transition metal complexes, chemical equilibrium, chemical thermodynamics, kinetics, aqueous solutions, net ionic equations, oxidation – reduction equations, electrochemistry and nuclear processes. In the laboratory, qualitative analysis of common metallic and 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 Mathematics 43 with a minimum grade of C in prerequisite or qualification by testing (El Camino College Mathematics Placement Test) and assessment

Recommended Preparation: 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 80

Credit, degree applicable

Transfer CSU, UC\*

The general chemistry topics in the course are units of measurement, atomic structure, the periodic table, inorganic formulas and nomenclature, chemical bonding, common chemical reactions, stoichiometry, states of matter, solutions, introduction to reaction rates and equilibrium, elementary acid-base theory and pH and buffers. The organic chemistry portion of the course studies the properties, nomenclature, common reactions and some reaction mechanisms for several classes of organic compounds. These classes include alkanes, alkenes, alkynes, alcohols, phenols and ethers. There is also an introduction to resonance and stereoisomerism. The emphasis in the laboratory is on observations and measurements.

\*Note: Students will not receive UC credit for Chemistry 21A if taken after 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 99**

(formerly 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\*

This course provides special advanced studies in a subject field of Chemistry not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Chemistry projects (54 hours per unit).

\*Note: Transfer limitations apply.

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



## CHILD 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 child development program prepares students for careers in private or public programs serving infants, toddlers, preschoolers, children with special needs, or children in before and after school care. The transfer degree option prepares students to continue studies at a four-year institution and major in Child Development, Child and Adolescent Development, Human Development, or Education. Students will acquire the ability to apply developmental theories in observing and assessing children in physical, cognitive, and psychosocial domains and will develop skills needed for working effectively with families, co-workers, and community agencies. Students will also gain the ability to design, implement, and evaluate developmentally appropriate and culturally sensitive curriculum. Program assessment will be conducted regularly through examinations, presentations, student self-assessment, portfolios, and tracking student employment and promotion in the teaching field.

A minimum of 12 units of the major requirements must be completed at El Camino College.

#### Course Title

##### **Required Core: 18 units**

CDEV 103	Child Growth and Development (3)
CDEV 104	The Home, The School, The Community (3)
CDEV 108	Principles and Practices of Teaching Young Children (3)
CDEV 112	Teaching Young Children in a Diverse Society (3)
CDEV 114	Observing and Assessing Young Children (3)
CDEV 150	Introduction of Children with Special Needs (3)
or	
CDEV 152	Curriculum and Strategies for Children with Special Needs (3)

##### **6 units from:**

CDEV 115	Introduction to Curriculum (3)
CDEV 116	Creative Art for Young Children (3)
CDEV 117	Music and Movement for Young Children (3)
CDEV 118	Science and Math for Young Children (3)
CDEV 119	Language Arts for Young Children (3)

##### **3 units from:**

CDEV 106	Care and Education for Infants and Toddlers (3)
CDEV 107	Infant/Toddler Development (3)
CDEV 110	Child Health, Safety, and Nutrition (3)
CDEV 115	Introduction to Curriculum (3)
CDEV 116	Creative Art for Young Children (3)
CDEV 117	Music and Movement for Young Children (3)
CDEV 118	Science and Math for Young Children (3)
CDEV 119	Language Arts for Young Children (3)
CDEV 125	Child Development Practicum I (3)
CDEV 126	Child Development Practicum II (3)
CDEV 129	Introduction to Program Administration (3)
CDEV 130	Principles of Program Administration (3)
CDEV 131	Supervising and Mentoring Adults (3)
CDEV 150	Introduction of Children with Special Needs (3)
CDEV 152	Curriculum and Strategies for Children with Special Needs (3)
CDEV 154	Role and Responsibilities of the Special Education Assistant (3)
CDEV 160	Working with Children: Autism Spectrum Disorders (1)
CDEV 163	Working with Children: Attention Deficit Disorders (1)
CDEV 166	Working with Children: Physical Disabilities/ Health Impairments (1)
CDEV 169	Special Education Practicum (3)
NFOO 15	Nutrition for Infants and Young Children (3)

##### **Total Units: 27**

Note: Proof of a valid Pediatric CPR and First Aid Certification may be required for employment.

### Preparation for the Child Development Transfer Major

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

### Certificates of Achievement

A Certificate of Achievement will be granted upon completion of all program requirements. A minimum of 12 units must be completed at El Camino College.

### Early Childhood Education Certificate of Achievement

#### Course Title

#### Required Core: 15 units

CDEV 103	Child Growth and Development (3)
CDEV 104	The Home, The School, The Community (3)
CDEV 108	Principles and Practices of Teaching Young Children (3)
CDEV 112	Teaching Young Children in a Diverse Society (3)
CDEV 114	Observing and Assessing Young Children (3)

#### 3 units from:

CDEV 115	Introduction to Curriculum (3)
CDEV 116	Creative Art for Young Children (3)
CDEV 117	Music and Movement for Young Children (3)
CDEV 118	Science and Math for Young Children (3)
CDEV 119	Language Arts for Young Children (3)

#### Total Units: 18

Note: Proof of a valid Pediatric CPR and First Aid Certification may be required for employment.

### Early Intervention Assistant Certificate of Achievement

#### Course Title

#### Required Core: 21 units

CDEV 103	Child Growth and Development (3)
CDEV 104	The Home, The School, The Community (3)
CDEV 106	Care and Education for Infants and Toddlers (3)

or

CDEV 107	Infant/Toddler Development (3)
CDEV 110	Child Health, Safety, and Nutrition (3)
CDEV 150	Introduction of Children with Special Needs (3)
CDEV 152	Curriculum and Strategies for Children with Special Needs (3)
CDEV 169	Special Education Practicum (3)

#### 6 units from:

CDEV 115	Introduction to Curriculum (3)
CDEV 116	Creative Art for Young Children (3)
CDEV 117	Music and Movement for Young Children (3)
CDEV 118	Science and Math for Young Children (3)
CDEV 119	Language Arts for Young Children (3)

#### 3 units from:

CDEV 106	Care and Education for Infants and Toddlers (3)
CDEV 107	Infant/Toddler Development (3)
CDEV 114	Observing and Assessing Young Children (3)
CDEV 160	Working with Children: Autism Spectrum Disorders (1)
CDEV 163	Working with Children: Attention Deficit Disorders (1)
CDEV 166	Working with Children: Physical Disabilities/ Health Impairments (1)

#### Total Units: 30

Note: Proof of a valid Pediatric CPR and First Aid Certification may be required for employment.

Note: Courses may not be counted in more than one category.

## Special Education Assistant Certificate of Achievement

### Course Title

#### Required Core 18 units

CDEV 103	Child Growth and Development (3)
CDEV 104	The Home, The School, The Community (3)
CDEV 110	Child Health, Safety, and Nutrition (3)
CDEV 150	Introduction of Children with Special Needs (3)
CDEV 152	Curriculum and Strategies for Children with Special Needs (3)
CDEV 169	Special Education Practicum (3)

#### 3 units from:

CDEV 115	Introduction to Curriculum (3)
CDEV 116	Creative Art for Young Children (3)
CDEV 117	Music and Movement for Young Children (3)
CDEV 118	Science and Math for Young Children (3)
CDEV 119	Language Arts for Young Children (3)

#### 6 units from:

CDEV 108	Principles and Practices of Teaching Young Children (3)
CDEV 112	Teaching Young Children in a Diverse Society (3)
CDEV 114	Observing and Assessing Young Children (3)
CDEV 160	Working with Children: Autism Spectrum Disorders (1)
CDEV 163	Working with Children: Attention Deficit Disorders (1)
CDEV 166	Working with Children: Physical Disabilities/ Health Impairments (1)
NURS 118	Respite Care for Children and Adolescents (3)
NFOO 15	Nutrition for Infants and Young Children (3)
SLAN 111	American Sign Language I (4)

#### Total Units: 27

Note: Proof of a valid Pediatric CPR and First Aid Certification may be required for employment.

For Gainful Employment program information, please visit [www.elcamino.edu/academics/behavioralsocial/childhood](http://www.elcamino.edu/academics/behavioralsocial/childhood).

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 9 additional units in Program Administration (Child Development 129, 130, and 131).

### 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, English 27; Psychology 5 or Sociology 101 or Anthropology 2. The following Child Development Permits are issued:

1. Assistant
2. Associate Teacher
3. Teacher
4. Master Teacher
5. Site Supervisor
6. Program Director

For further information, please contact a counselor or the Child Development Permit Specialist at 310-660-3593 ext. 3755 or email at [childhooded@elcamino.edu](mailto:childhooded@elcamino.edu).



## EARLY CHILDHOOD EDUCATION

### AS-T Degree

#### *Behavioral and Social Sciences Division*

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

The program prepares students for careers in private or public programs serving infants, toddlers, preschoolers, children with special needs, or children in before and after school care. The transfer degree option prepares students to continue studies at a four-year institution and major in Child Development, Child and Adolescent Development, Human Development, or Education. Students will acquire the ability to apply developmental theories in observing and assessing children in physical, cognitive, and psychosocial domains and will develop skills needed for working effectively with families, co-workers, and community agencies. Upon successful completion of the program, students will be prepared for careers in child care with infants and toddlers, preschool teaching, assistant teaching, and related careers in childhood education. Program assessment will be conducted regularly through examinations, presentations, student self-assessment, portfolios, and tracking student employment and promotion in the teaching field.

The Associate in Science for Transfer (AS-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AS-T are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AS-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.

3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AS-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AS-T.

Course	Title
CDEV 103	Child Growth and Development (3)
CDEV 104	The Home, The School, The Community (3)
CDEV 108	Principles and Practices of Teaching Young Children (3)
CDEV 110	Child Health, Safety, and Nutrition (3)
CDEV 112	Teaching Young Children in a Diverse Society (3)
CDEV 114	Observing and Assessing Young Children (3)
CDEV 115	Introduction to Curriculum (3)
CDEV 125	Child Development Practicum I (3)
or	
CDEV 126	Child Development Practicum II (3)
<b>Total Units: 24</b>	

### Child Development 103

#### *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 an emphasis on the interaction between the maturational processes and environmental factors relating to physical, cognitive, and psychosocial growth. While studying developmental theory and investigative research methodologies, students will observe and interview children, evaluate individual differences and analyze characteristics of development at various stages. Also, the effect of cultural influences on development will be studied.

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

### Child Development 104

#### *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 in the home, the family, the school, and the community. Emphasis is placed on the importance of respectful, reciprocal relationships that support and empower families. Influences of social agents such as family support services, educational systems, media, and peers, and on how these social agents contribute in preparing the child for living independently in a diverse society will also be explored. Additional topics include parenting styles, schooling, roles of teachers, peers, the media, children with special needs, cultural influences on behavior, child abuse, neglect, and social policy.

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

**Child Development 106***Care and Education for Infants and Toddlers**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 study the principles of inclusive and respectful care giving for infants and toddlers in relation to curriculum development and design. Students will apply current theory and research to the care and education of infants and toddlers in group settings as they study typical and atypical development of infants/toddlers. Essential policies, principles and practices that lead to quality care and developmentally appropriate curriculum for children birth to 36 months will be examined. Topics include current brain research, issues relating to health and safety, licensing requirements, observation techniques, assessment strategies, as well as ways to communicate with parents, implement home visits, and develop early intervention plans.

**Child Development 107***Infant/Toddler Development**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 study infants and toddlers from pre-conception to age three including physical, cognitive, language, social, and emotional growth and development. Students will apply theoretical frameworks to interpret behavior and interactions between heredity and environment. Students will focus on the role of family, the effect of the adult-child relationship on an infant's development, practical applications of developmental theories in relation to infant/toddler group care, and the importance of demonstrating respectful and sensitive practices in relation to cultural differences in child care settings. Topics include developmentally appropriate environments, curriculum, and state-mandated licensing regulations.

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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 108***Principles and Practices of Teaching Young Children**3 units; 3 hours lecture**Prerequisite: Child Development 103 with a minimum grade of C or concurrent enrollment**Recommended Preparation: eligibility for English 1A**Credit, degree applicable**Transfer CSU*

This course examines the underlying theoretical principles of developmentally appropriate practices applied to programs and environments. The key role of relationships, constructive adult-child interactions, and teaching strategies in supporting physical, social, emotional, creative, and cognitive development in young children will be emphasized. This course includes a review of the historical roots of early childhood programs and current philosophies and methodologies of early childhood education. Topics include observation, analysis, and assessment of young children's development, identification of effective teaching strategies, age appropriate environments, and professional ethics.

**Child Development 110***Child Health, Safety, and Nutrition**3 units; 3 hours lecture**Recommended Preparation: eligibility for English 1A**Credit, degree applicable**Transfer CSU*

This course is an introduction to the laws, regulations, standards, policies, procedures, and early childhood curriculum related to child health, safety, and nutrition. It is designed to meet the needs of parents, family child care providers and center-based teachers who are interested in increasing their knowledge of these 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 112***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**Recommended Preparation: eligibility for English 1A**Credit, degree applicable**Transfer CSU*

In this course, students will examine the development of social identities in diverse societies including theoretical and practical implications of oppression and privilege as they apply to young children, families, programs, classrooms and teaching. Various classroom strategies will be explored emphasizing culturally and linguistically appropriate anti-bias approaches supporting all children in becoming competent members of a diverse society. Topics include self-examination and reflection on issues related to social identity, stereotypes and bias, social and educational access, and media and schooling.

**Child Development 114*****Observing and Assessing Young Children****3 units; 3 hours lecture**Prerequisite: Child Development 103 with a minimum grade of C or concurrent enrollment**Recommended Preparation: eligibility for English 1A**Credit, degree applicable**Transfer CSU*

In this course, students will examine the appropriate use of assessment and observational strategies for young children and document development, growth, play, and learning in order to work with families and professionals in promoting children's success and maintaining quality programs. Recording strategies, rating systems, portfolios, and multiple assessment methods will be explored. Students will analyze, through observation and research, common behavioral issues and the possible underlying influences on behavior. The role of the teacher in promoting an environment which fosters appropriate behavior will be examined. Students will be required to conduct observations in local school programs.

**Child Development 115*****Introduction to Curriculum****3 units; 3 hours lecture**Prerequisite: Child Development 103 with a minimum grade of C or concurrent enrollment**Recommended Preparation: eligibility for English 1A**Credit, degree applicable**Transfer CSU*

This course presents an overview of knowledge and skills related to providing appropriate curriculum and environments for young children from birth to age six. Students will examine the teacher's role in supporting development and fostering an enthusiasm for learning for all young children using observation and assessment strategies emphasizing the essential role of play. An overview of content areas will include language and literacy, social and emotional learning, sensory learning, art and creativity, music and movement, and math and science.

**Child Development 116*****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**Recommended Preparation: eligibility for English 1A**Credit, degree applicable**Transfer CSU*

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

**Child Development 117*****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**Recommended Preparation: eligibility for English 1A**Credit, degree applicable**Transfer CSU*

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

**Child Development 118*****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**Recommended Preparation: eligibility for English 1A**Credit, degree applicable**Transfer CSU*

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

**Child Development 119****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**Recommended Preparation: eligibility for English 1A**Credit, degree applicable**Transfer CSU*

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

**Child Development 125****Child Development Practicum I***3 units; 2 hours lecture, 3 hours lab per week to be arranged**Prerequisite: Child Development 103 and 104;**one course from Child Development 115, 116, 117, 118 or 119 with a minimum grade of C in prerequisite**Credit, degree applicable**Transfer CSU*

This course provides a practical application of learning theories in early childhood education programs. Students will design, implement, and evaluate experiences that promote positive development and learning for all young children and will observe and interact with children and staff in supervised child care settings. The course includes methods of working effectively with children, observation and guidance techniques, the role of the preschool teacher and classroom assistant, effective communication with staff and parents, educational requirements and techniques for gaining employment in the field.

*Note: Students are required to have proof of a current (within 2 years) negative TB test. LiveScan at the practicum site may also be required. Students are responsible for paying these fees.*

**Child Development 126****Child Development Practicum II***3 units; 2 hours lecture, 3 hours lab per week to be arranged**Prerequisite: Child Development 104, 108; Child Development 150 or 152; and two courses from Child Development 115, 116, 117, 118 or 119 with a minimum grade of C in prerequisite. One of these courses may be taken concurrently with Child Development 126.**Credit, degree applicable**Transfer CSU*

In this course, students will apply and implement developmental teaching theories in an early childhood education setting under guided supervision. The course includes planning, demonstrating, and evaluating learning experiences for children. This course covers aspects of teaching such as strategies for working with children and adults, classroom management skills, program philosophies, and techniques for gaining employment.

*Note: Students are required to have proof of a current (within 2 years) negative TB test. LiveScan at the practicum site may also be required. Students are responsible for paying these fees.*

**Child Development 129****Introduction to Program Administration***3 units; 3 hours lecture**Prerequisite: Child Development 125 or 126 with a minimum grade of C or concurrent enrollment or 50 days of preschool teaching experience within the past two years**Credit, degree applicable**Transfer CSU*

This course offers an introduction to the administration of early childhood programs and focuses on the regulations, standards and practices for licensed preschool programs. Program types, budgeting, management, regulations, laws, as well as the development and implementation of policies and procedures, are presented. Topics include the role of the program director, interpersonal relationships, public relations, staff recruitment and selection, and community resources. Students will examine administrative tools, philosophies, and techniques needed to organize, open, and operate an early care and education program.

**Child Development 130****Principles of Program Administration***3 units; 3 hours lecture**Prerequisite: Child Development 125 or 126 with a minimum grade of C or concurrent enrollment or 50 days of preschool teaching experience within the past two years**Credit, degree applicable**Transfer CSU*

This course emphasizes the role of the director in child care programs. Topics include legislative policies, legal and ethical responsibilities, supervision techniques, fiscal management, leadership styles, professional development and reflective practices. Effective communication strategies for working with staff and parents, as well as personnel management and leadership, in diverse and inclusive early care and education programs, will also be discussed.

**Child Development 131****Supervising and Mentoring Adults***3 units; 3 hours lecture**Prerequisite: Child Development 125 or 126 with a minimum grade of C or concurrent enrollment or 50 days of preschool teaching experience within the past two years**Credit, degree applicable**Transfer CSU*

In this course, students will study the principles and practices of supervising and evaluating student teachers, volunteers, staff, and other adults in early care and education settings. Topics will include balancing the needs of children, families and staff, ethics, advocacy, and professionalism in the field. Emphasis will be placed on the development of early childhood professionals as mentors and leaders.

*Note: This course fulfills the adult supervision requirement for the Child Development Permit and the California Early Childhood Mentor Teacher Program.*

**Child Development 150*****Introduction of Children with Special Needs****3 units; 3 hours lecture**Recommended Preparation: eligibility for English 1A**Credit, degree applicable**Transfer CSU*

This course offers an overview of the causes, characteristics, prevalence, and needs of children with mild to severe physical, cognitive, and behavioral conditions from birth to age 22 with an emphasis on children ages birth through eight. Students are introduced to the variations in development of children with special needs and the resulting impact on families. An overview of historical and societal influences, laws relating to children with special needs, and the identification and referral process is also examined. Topics include the identification of community agencies for referral and case management, inclusion of children with special needs into mainstream classrooms, and the special needs of gifted and talented children.

**Child Development 152*****Curriculum and Strategies for Children with Special Needs****3 units; 3 hours lecture**Recommended Preparation: eligibility for English 1A**Credit, degree applicable**Transfer CSU*

In this course, students will study curriculum and intervention strategies for working with children with special needs. Focus will be placed on the use of observation and assessment in meeting the individualized needs of children in inclusive and natural environments. The role of the teacher, the special education assistant, and the in-home respite care provider will be emphasized. Topics include working in partnership with families, designing curriculum and accommodations, collaborating with interdisciplinary teams, and developing cultural competence and responsiveness.

**Child Development 154*****Role and Responsibilities of the Special Education Assistant****3 units; 3 hours lecture**Recommended Preparation: eligibility for English 1A**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 also 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. Students will examine common physical disabilities such as Cerebral Palsy and Spina Bifida and other health impairments such as Asthma and Diabetes. Introduction to the various types of medical and technological support required for these children during the school day and in the home will be discussed. Topics 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 115 or 116 or 117 or 118 or 119 with a minimum grade of C in prerequisite

Credit, degree applicable

Transfer CSU

This practicum provides students with supervised experience working with infants, toddlers, and young children with special needs in a variety of early intervention and education settings, such as self-contained or fully-included day care programs, regional centers, or early childhood classrooms. Students will assist in the planning and implementation of intervention strategies and will work collaboratively with families as well as early intervention and special education professionals. Students will develop communication skills that are culturally sensitive towards the unique needs of children and families of children with special needs.

Note: Students are required to have proof of a current (within 2 years) negative TB test. LiveScan at the practicum site may also be required. Students are responsible for paying these fees.

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

4 units; 5 hours lecture

Recommended Preparation: eligibility for English A

Credit, degree applicable

Transfer CSU, UC

This course introduces and develops students' skills for language acquisition in listening, speaking, reading, and writing Mandarin Chinese. Students also are introduced to the cultural background of the language. Technological support and tutorial services enhance the course.

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

**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 through intensive practice in listening, speaking, reading, and writing. Students improve their oral communication skills and extend their study of the basic grammar, vocabulary and Chinese characters. Technological support and tutorial services enhance the course.

Note: The prerequisite for this course is comparable to two years of high school Chinese.

**Chinese 3****Intermediate Chinese I**

4 units; 5 hours lecture

Prerequisite: Chinese 2 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC

In this intermediate course, taught within the context of Chinese culture, students develop their functional communication skills in Mandarin Chinese through listening, speaking, reading, and writing practice. Students expand their knowledge of the Chinese language and culture. Students read material drawn from daily Chinese life.

Note: The prerequisite for this course is comparable to three years of high school Chinese.

**Chinese 21**

(formerly 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 22**

(formerly Chinese 22ab)

**Intermediate Conversational Chinese**

2 units; 2 hours lecture

Prerequisite: Chinese 2 and Chinese 21 with a minimum grade of C in prerequisite or equivalent

Credit, degree applicable

Transfer CSU, UC

This course is designed for the intermediate student to develop fluency in oral expression, to increase oral comprehension and to improve pronunciation. Conversational topics are based upon the daily experiences and cultural life of the ethnic areas involved with the language.

**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 99**

(formerly 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\**

This course provides advanced studies in a subject field of Chinese education not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Chinese education projects (54 hours per unit).

*\*Note: Transfer limitations apply.**Note: For eligibility requirements, go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)***COMMUNICATION STUDIES****AA-T 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.

The Associate in Arts for Transfer (AA-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AA-T are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AA-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AA-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AA-T.

At least 12 units required for the Communication Studies AA-T must be completed at El Camino College.

**Course Title****Required Core: 3 units**

COMS 100 Public Speaking (3)

**List A: 6 units**

COMS 120 Argumentation and Debate (3)

COMS 130 Interpersonal Communication (3)

COMS 140 Small Group Communication (3)

**List B: 6 units**

COMS 250 Oral Interpretation of Literature (3)

COMS 260 Introduction to Intercultural Communication (3)

COMS 265 Mass Communication (3)

**List C: 3 units**

ANTH 2 Introduction to Cultural Anthropology (3)

ANTH 4 Language and Culture (3)

COMS 270 Organizational Communication (3)

COMS 292abcd\* Forensics – Individual Events (2)

COMS 293abcd\* Forensics – Team Events (2)

ENGL 1B Literature and Composition (3)

PSYC 5 General Psychology (3)

SOC 101 Introduction to Sociology (3)

**Total Units: 18**

\*Note: One semester each of COMS 292abcd and COMS 293abcd may be counted for the major.

**Communication Studies 99**

(formerly Communication Studies 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\**

This course provides special advanced studies in a subject field of Communication Studies not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Communication Studies projects (54 hours per unit).

*\*Note: Transfer limitations apply.*

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

**Communication Studies 100**

(formerly Communication Studies 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 120**

(formerly Communication Studies 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 130**

(formerly Communication Studies 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, nonverbal communication, listening, intimacy, defensiveness, and conflict resolution. Students are required to give formal and informal oral presentations and write reports.

**Communication Studies 140**

(formerly Communication Studies 3)

**Small Group Communication**

3 units; 3 hours lecture

*Recommended Preparation: eligibility for English 1A*

*Credit, degree applicable*

*Transfer CSU, UC*

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

**Communication Studies 250**

(formerly Communication Studies 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 260**

(formerly Communication Studies 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 265**

(formerly Communication Studies 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 Communication Studies 265 and Journalism 12 is one course.

**Communication Studies 270**

(formerly 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 theories, methods and practices of communication that contribute to productivity and efficiency in private and public organizations. Emphasis is placed on the social science implications of communication and includes topics such as internal and external communication, interpersonal and group processes, and international communication.

**Communication Studies 290abcd**

(formerly Communication Studies 25abcd)

**Forensics - Winter Events**

1 unit; 3 hours lab

Recommended Preparation: Communication Studies 293abcd

Enrollment Limitation: audition

Credit, degree applicable

Transfer CSU

This course provides training for and participation in winter forensics events at winter intercollegiate speech competitions. Students receive instruction and direction for the preparation, creation, and delivery of various speech, debate, and performance styles offered at winter forensics competitions. All students will compete in winter intercollegiate forensics competitions.

**Communication Studies 292abcd**

(formerly 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 and participation in individual forensics events at intercollegiate speech competitions. The student will receive instruction and direction for the preparation, creation, and performance of interpretation of literature programs, limited preparation speeches, and general public address. Students will compete in intercollegiate forensics competitions.

**Communication Studies 293abcd**

(formerly 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 and participation in intercollegiate forensics competitions. The student will receive instruction and direction for the creation and performance of Readers Theater. Students will receive instruction and preparation for current event debates and Limited Preparation Parliamentary Debate. Students will compete in intercollegiate forensics competitions.



## 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 many career and technical courses which rely heavily on computers and software applications. Students will use three-dimensional software design packages such as AutoCAD, Revit, and ArchiCAD in Architectural courses. Students in fashion design and patternmaking will use Gerber software; whereas students who take Computer Aided Design and Drafting (CADD) will use other three-dimensional design software applications such as: Inventor, Solidworks, and CATIA. Students who take machine tool or manufacturing courses may use other three-dimensional programs like Solidworks or CATIA for design and then use a program such as MasterCAM to generate machine operation commands for use in computer numeric control (CNC) programming used to manufacture products. In electronics, students may use a National Instruments NI MultiSIM software to design, simulate, and analyze digital and analog electronic circuits. The selection of computers and software applications are made by faculty and industry advisers with the intention of preparing students for employment with the technical skills required in today's competitive workplace. For additional information on computers and software applications, see specific technology programs and course listings under Architecture, Computer Aided Design/ Drafting, Electronics, Engineering Technology, Fashion (computer fashion illustration and patternmaking), Manufacturing, and Machine Tool in the current college catalog. Students interested in computer hardware, should seek additional courses under the heading Electronics and Computer Hardware Technology.

### Computer Information Systems

The Business Division offers courses for students interested in a Computer Information Systems Associate in Science degree, career placement or advancement, transfer to a four-year school in Computer Information Systems, Information Systems or Management Information Systems or students desiring a Certificate of Achievement in a variety of areas including User Support Specialist, CISCO and Business Programming Languages. The courses offered cover application packages such as Excel or Access; major commercial programming languages such as Visual Basic.NET, ASP.NET, and C#; scripting and mark-up languages such as HTML, XHTML, XML, JavaScript and AJAX; and networking certification. Operating systems and development tools include current versions of Windows, Visual Studio, and SQL Server Express. Students desiring knowledge of information processing systems as a support specialist, programmer, networking specialist, application software user, or 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, assembly language, 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](http://www.elcamino.edu/academics/indtech)

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

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

#### Course Title

**Required Core: 23.5**

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

#### 3-4 units from:

ECHT 11	Introduction to Electronics (3)
ECHT 22	Basic Electronic Fabrication (3)
MTT 16	General Metals (3)
MTT 46	Basic Machine Tool Operation (3)
MTT 101	Introduction to Conventional and CNC Machining (4)
WELD 15	Basic Welding for Allied Fields (3)
ART 141	Digital Art Fundamentals (3)
ART 144	3D Modeling and Animation (3)
CIS 13	Computer Information Systems (3)

**Total Units: 26.5 - 27.5**

#### Certificate of Achievement

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

#### Computer Aided Design/Drafting Certificate of Achievement

##### Course Title

**Required Core: 23.5**

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

#### 3-4 units from:

ECHT 11	Introduction to Electronics (3)
ECHT 22	Basic Electronic Fabrication (3)
MTT 16	General Metals (3)
MTT 46	Basic Machine Tool Operation (3)
MTT 101	Introduction to Conventional and CNC Machining (4)
WELD 15	Basic Welding for Allied Fields (3)
ART 141	Digital Art Fundamentals (3)
ART 144	3D Modeling and Animation (3)
CIS 13	Computer Information Systems (3)

**Total Units: 26.5 - 27.5**

#### Certificate of Accomplishment

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

### AutoCAD Mechanical Drafting Trainee Certificate of Accomplishment

Course	Title
CADD 5	Introduction to Mechanical Drafting (3)
CADD 7	Solid Modeling, Assemblies and Two Dimensional (2D) Drawings (3)
<b>Total Units: 6</b>	

For Gainful Employment program information, please visit [www.elcamino.edu/academics/indtech/cadd/](http://www.elcamino.edu/academics/indtech/cadd/)

#### 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 7

(formerly Computer Aided Design/Drafting 10abcd)

##### *Solid Modeling, Assemblies and Two Dimensional (2D) Drawings*

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 two-dimensional (2D) sketches, three-dimensional (3D) wireframe and solid models. Models or assemblies are displayed on a 2D drawing format and orthographically projected with dimensions added. Shading, rendering and solid model modifications are also available in the 2D mode. Auxiliary, detail and section views are also created with the use of the place view toolbar and its commands. This course utilizes Autodesk Inventor Pro software (Inventor Pro).

#### Computer Aided Design/Drafting 28

(formerly Computer Aided Design/Drafting 28abcd)

##### *Parametric Three Dimensional (3D) Modeling and Assemblies*

2 units; 1 hour lecture, 3 hours lab

Credit, degree applicable

Transfer CSU

In this course, students create three-dimensional (3D) models, assemblies, orthographic two-dimensional (2D) drawings with dimensions, detail, auxiliary and section views. Students will also create exploded animated assemblies (kinematics). This course utilizes Dassault SolidWorks software (SolidWorks).

#### Computer Aided Design/Drafting 31

(formerly 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 32

(formerly Computer Aided Design/Drafting 32abcd)

##### *Product Modeling with CATIA*

2 units; 1 hour lecture, 3 hours lab

Recommended Preparation: Computer Aided Design/Drafting 31

Credit, degree applicable

Transfer CSU

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

#### Computer Aided Design/Drafting 33

(formerly Computer Aided Design/Drafting 33abcd)

##### *Analyses and Simulations with CATIA*

2 units; 1 hour lecture, 3 hours lab

Recommended Preparation: Computer Aided Design/Drafting 31

Credit, degree applicable

Transfer CSU

This course explores the analysis and simulation features of CATIA\*. Subjects include knowledgware, kinematic analysis, generative stress analysis, and other Computer Aided Engineering (CAE) functions. (\*CATIA is a registered trademark of Dassault Systems.)

#### Computer Aided Design/Drafting 37

(formerly Computer Aided Design/Drafting 37abcd)

##### *Advanced CATIA Functions*

2 units; 1 hour lecture, 3 hours lab

Recommended Preparation: Computer Aided Design/Drafting 31

Credit, degree applicable

Transfer CSU

This course covers wireframe and surface functionality using CATIA\* software. Advanced Three Dimensional (3D) surface models are created, manipulated, analyzed and rendered. Additional instruction covers hybrid design utilizing solid and surface 3D models. (\*CATIA is a registered trademark of Dassault Systems.)

**Computer Aided Design/Drafting 43*****Design Process and Concepts****4.5 units; 3 hours lecture, 5 hours lab**Prerequisite: Computer Aided Design/Drafting 7 or 28 or 31 with a minimum grade of C in prerequisite or equivalent Credit, degree applicable**Transfer CSU, UC*

This advanced design and drafting course addresses the processes of product design, from concept through final production drawings, 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 95**

(formerly 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\**

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: Transfer limitations apply.**Note: The total units earned for Cooperative Work Experience Education may not exceed 16 units.***Computer Aided Design/Drafting 99**

(formerly 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\**

This course provides special advanced studies in a subject field of Computer Aided Design/Drafting not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Computer Aided Design/Drafting projects (54 hours per unit).

*\*Note: Transfer limitations apply.**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.

#### Course Title

##### Required Core: 9 units

CIS 13	Computer Information Systems (3)
CIS 18	Systems Analysis and Design (3)
CIS 19	Internet, Security, and the Web (3)

##### 6 units from:

CIS 26	Using Microsoft Excel (3)
CIS 28	Database Management using Microsoft Access (3)

or

CIS 140	Data Communications Cisco 1 (3)
CIS 141	Networking Microcomputers Cisco 2 (3)

##### Select one of the following groups of courses: 9-11 units

##### Help Desk:

BUS 27	Effective English for Business (3)
CIS 11	Help Desk Operations (3)
CIS 40	Personal Computer Operations (3)

##### Advanced Applications:

CIS 29	Advanced Database Applications (3)
CIS 80	Database Programming (4)

##### Networking:

CIS 40	Personal Computer Operations (3)
CIS 142	Local Area Network (LAN) Switching and Wireless Cisco 3 (3)
CIS 143	Accessing the WAN - Cisco 4 (3)

##### Programming:

CIS 16	Application Development and Programming Using Visual Basic.Net (3)
CIS 133	Mashup JavaScript, jQuery and AJAX (4)
CIS 134	ASP.NET with C# Business Web Programming (4)

##### Mobile and Web Programming:

CIS 30	Introduction to Electronic Commerce (3)
CIS 133	Mashup JavaScript, jQuery and AJAX (4)
CIS 134	ASP.NET with C# Business Web Programming (4)
CIS 136	Building Mobile Apps (3)

**Total Units: 24-26**

##### Certificate of Achievement

A Certificate of Achievement will be granted upon completion of all program requirements. A minimum of 15 units must be completed at El Camino College and a grade point average of "B" is necessary in the required 21-22 units.

##### Computer Systems Applications Certificate of Achievement

#### Course Title

##### Required Core: 15 units

CIS 13	Computer Information Systems (3)
CIS 18	Systems Analysis and Design (3)
CIS 19	Internet, Security, and the Web (3)
CIS 26	Using Microsoft Excel (3)
CIS 28	Database Management using Microsoft Access (3)

##### Programming: 3-4 units

CIS 16	Application Development and Programming Using Visual Basic.Net (3)
CIS 133	Mashup JavaScript, jQuery and AJAX (4)
CIS 134	ASP.NET with C# Business Web Programming (4)
CIS 136	Building Mobile Apps (3)

##### User Support: 3 units

CIS 11	Help Desk Operations (3)
CIS 30	Introduction to Electronic Commerce (3)
CIS 40	Personal Computer Operations (3)

**Total Units: 21-22**

For Gainful Employment program information, please visit [www.elcamino.edu/academics/business/cis](http://www.elcamino.edu/academics/business/cis)

**Computer Information Systems 2****Office Applications***3 units; 2 hours lecture, 3 hours lab**Credit, not degree applicable*

In this course, students are introduced to the Windows operating system and the capabilities of the computer. The file management system, spreadsheets, presentation software, email management, and beginning through advanced word processing topics will be taught in a hands-on environment. Operation of the computer as a general purpose office tool will be emphasized. This course uses Microsoft Word, Excel, PowerPoint, and Outlook.

*Note: Letter grade or pass/no pass option.***Computer Information Systems 11****Help Desk Operations***3 units; 2 hours lecture, 3 hours lab**Prerequisite: Computer Information Systems 13 with a minimum grade of C or equivalent experience**Credit, degree applicable**Transfer CSU*

This course focuses on current, recognized, best practices in the field of help desk and end-user support targeting the field of Information Technology. Topics include end-user support roles within an organization, strategies in dealing with end-users, technical support documentation, and problem identification/resolution. Course emphasis is placed on using software tools to understand and implement service desk processes such as user support process flow, incident management, needs analysis, troubleshooting, and support documentation.

*Note: Letter grade or pass/no pass option.***Computer Information Systems 13****Computer Information Systems***3 units; 3 hours lecture, 2 hours lab**Prerequisite: eligibility for English 84**Recommended Preparation: Mathematics 23 or Business 15**Credit, degree applicable**Transfer CSU, UC*

This course introduces students to the concepts and technologies used in processing information in an organization. Topics include information systems, database management systems, networking, e-commerce, ethics and security, computer systems hardware, and applications. Students will apply these concepts and methods through hands-on projects developing computer-based solutions using application software.

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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 16****Application Development and Programming Using Visual Basic.Net***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**Transfer CSU, UC*

This course is an introduction to the fundamental concepts and models of application development including program design, data structures, programming, problem solving, programming logic, and design techniques for event-driven programs. A step-by-step, hands-on, project experience is used with a modern application programming language and development platform.

**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 systems analysis and design concepts as they are applied in business environments. Topics emphasize methodologies used by the analyst throughout the systems development life cycle to analyze business problems or opportunities, address user needs, perform feasibility studies, specify business requirements through process, data and logic modeling, consideration of development alternatives, and implementation and maintenance of systems.

**Computer Information Systems 19****Internet, Security, and the Web***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**Transfer CSU*

This course explores the current state of the Internet, web development, networking, and cyber security in correlation with emerging technologies. Topics discussed and examined through various assignments include internet security, risk management, network defense, virus attacks, cloud computing, social networking, and the web.

**Computer Information Systems 26****Using Microsoft Excel***3 units; 2 hours lecture, 2 hours lab**Prerequisite: 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 28***Database Management using Microsoft Access**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**Transfer CSU*

This course offers instruction in the use of relational database management systems within a Windows environment. Students learn database concepts and terminology. Topics include designing, creating, and modifying table structures and relationships, and creating complex queries. Students create forms for viewing, entering, and editing data, and create reports that summarize and group information. Skills are applied to typical business operations such as inventory and human resources.

**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 advanced instruction in relational databases in a Windows environment. Students learn how to design and develop 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 Electronic Commerce**3 units; 2 hours lecture, 2 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 webmasters, website designers, and eCommerce business managers.

*Note: Letter grade or pass/no pass option.***Computer Information Systems 40***Personal Computer 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 personal computers within an organization. The class will emphasize both computer hardware and applications software. Topics covered will include personal computer concepts, computer devices, hardware management, applications and operating system software installation, maintenance and troubleshooting, and ethical concerns within the information systems environment.

**Computer Information Systems 80***Database 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 the structured query programming language (SQL), used in Oracle, SQL Server, and many other database applications, is introduced and developed in lectures and reinforced through a series of lab projects of increasing complexity. Topics include the building and manipulation of tables, data retrieval, and data administration, as used in modern business.

**Computer Information Systems 95***(formerly 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\**

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Computer Information Systems field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

*\*Note: Transfer limitations apply.**Note: The total units earned for Cooperative Work Experience Education may not exceed 16 units.*

**Computer Information Systems 99**

(formerly 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 acknowledgment by the instructor with whom the student will work**Credit, degree applicable**Transfer CSU\**

This course provides special advanced studies in the field of Computer Information Systems not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Computer Information Systems projects (54 hours per unit).

*\*Note: Transfer limitations apply.**Note: For eligibility requirements, go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)***Computer Information Systems 133****Mashup JavaScript, jQuery and AJAX***4 units; 3 hours lecture, 3 hours lab**Recommended Preparation: Computer Information Systems 13 or 19 or equivalent experience**Credit, degree applicable**Transfer CSU*

Students examine the fundamental concepts and structures of programming for the web using client-side markup 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 pass/no pass option.***Computer Information Systems 134****ASP.NET with C# Business Web Programming***4 units; 3 hours lecture, 3 hours lab**Recommended Preparation: Computer Information Systems 13 or 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 build a dynamic data-driven web application using SQL Server. Emphasis is placed on emerging web programming skills and technologies to prepare students for advanced programming applications and to enter the e-Business industry.

*Note: Letter grade or pass/no pass option.***Computer Information Systems 136****Building Mobile Apps***3 units; 2 hours lecture, 3 hours lab**Prerequisite: Computer Information Systems 13 with a minimum grade of C or equivalent experience**Credit, degree applicable**Transfer CSU*

In this course, students will design, develop, test, debug and launch mobile applications (apps) using open source standards, that are adaptable to various development frameworks such as Android, iOS, and Windows. Topics include design principles, application structure, graphics, user interfaces, animation, and data storage. Cross-platform tools to bridge frameworks and access native features of the mobile device including geolocation, accelerometer, notifications, and services will be covered.

**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 two in the Cisco Networking Academy program.*

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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 142***Local Area Network (LAN) Switching and Wireless Cisco 3**3 units; 2 hours lecture, 2 hours lab**Prerequisite: Computer Information Systems 141 with a minimum grade of C or equivalent**Credit, degree applicable**Transfer CSU*

This course provides an understanding of how switches are interconnected and configured to provide network access to Local Area Network users. It also provides instruction on how to integrate wireless devices into Local Area Networks. This course is technically oriented and will prepare students for industry certification.

*Note: This course is semester three in the Cisco Networking Academy program.**Note: Letter grade or pass/no pass option.***Computer Information Systems 143***Accessing the WAN - Cisco 4**3 units; 2 hours lecture, 2 hours lab**Prerequisite: Computer Information Systems 142 with a minimum grade of C or equivalent**Credit, degree applicable**Transfer CSU*

This course provides a fundamental understanding of WAN (Wide Area Network) networking concepts and a wide range of network technologies. Instruction will be given on several WAN technologies, including PPP (Point to Point), frame relay, and related topics, such as access control list, network address translation, and virtual private networks.

*Note: This course is semester four in the Cisco Networking Academy program.**Note: Letter grade or pass/no pass 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 SCIENCE****Certificate of Achievement***Mathematical Sciences Division**www.elcamino.edu/academics/mathsciences*

By completing the 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 all program requirements. A minimum of 16 units must be completed at El Camino College.

**Computer Science Certificate of Achievement****Course Title****Required Core: 9 units**

CSCI 1	Problem Solving and Program Design Using C++ (4)
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CSCI 2	Introduction to Data Structures (5)
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**12-13 units from:**

CSCI 3	Computer Programming in Java (4)
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CSCI 12	Programming for Internet Applications using PHP, JavaScript, and XHTML (5)
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CSCI 14	Computer Programming in Python for Computer Science (4)
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CSCI 30	Advanced Programming in C++ (4)
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CSCI 40	Introduction to UNIX and LINUX Operating Systems (4)
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MATH 210	Introduction to Discrete Structures (4)
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**Total Units: 21-22**

For Gainful Employment program information, please visit [www.elcamino.edu/academics/mathsciences/CompSciDeptInformation.asp](http://www.elcamino.edu/academics/mathsciences/CompSciDeptInformation.asp)

**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 or equivalent skill**Credit, degree applicable**Transfer CSU, UC*

This course is an introduction to problem solving and program design using structured, top-down, algorithmic development techniques applied to the solution of numeric and non-numeric problems. Software engineering topics such as analysis, design, implementation, testing, documentation, and maintenance of software are discussed. Laboratory work will be done using the C++ computer language. The course also summarizes the evolution of programming languages illustrating how this history has led to the paradigms available today.

*Note: This course meets the CSU general education requirement for mathematics and quantitative reasoning.*

**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.

**Computer Science 12*****Programming for Internet Applications using PHP, JavaScript, and XHTML****5 units; 5 hours lecture, 5 hours lab**Prerequisite: Computer Science 1 or Computer Information Systems 16 or 134 with a minimum grade of C or equivalent**Credit, degree applicable**Transfer CSU*

In this introductory Internet programming course, students learn the fundamentals of Internet programming with JavaScript and Hypertext Preprocessor (PHP), a widely used, open source, general-purpose server-side programming language. Students design and write applications that extend web servers. These applications use backend databases to process data submitted through web forms and provide access to dynamically generated web pages with the retrieved data from the database.

**Computer Science 14*****Computer Programming in Python for Computer Science****4 units; 3 hours lecture, 3 hours lab**Prerequisite: Mathematics 170 with a minimum grade of C or qualification by testing (El Camino College Mathematics Placement Test) and assessment or equivalent skill**Credit, degree applicable**Transfer CSU*

This course is an introduction to computer programming and algorithm design using Python programming language for computer science. The course covers the fundamentals of Python programming: basic data types, switching and looping constructs, functions, recursion, objects, arrays, and lists, and basic input and output, both interactive and with files.

**Computer Science 16***(formerly Computer Science 15P)****Assembly Language Programming for the IBM PC and Compatibles****4 units; 3 hours lecture, 3 hours lab**Prerequisite: Computer Science 1 or 3 or Computer Information Systems 80 with a minimum grade of C in prerequisite or equivalent and Mathematics 180 with a minimum grade of C or concurrent enrollment**Credit, degree applicable**Transfer CSU, UC*

This course includes detailed coverage of assembly language programming, based on the IBM compatible personal computer. Topics include hexadecimal arithmetic, two's complement arithmetic, memory organization, addressing modes, procedure calls, the stackframe, macros, calling assembly language procedures from Pascal or C/C++, recursion, BIOS and DOS interrupts, the floating point unit and instructions, and the debugger.

**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 pass/no pass option.***Computer Science 99***(formerly 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\**

This course provides special advanced studies in a subject field of Computer Science not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Computer Science projects (54 hours per unit).

*\*Note: Transfer limitations apply.**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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**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 subcrafts, and contracting. Completion of the degree or certificate requirements qualifies students to receive a maximum of two years credit applicable toward the California State Contractor's License Board experience requirement.

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

**Cabinet and Fine Woodworking Option:**

Course	Title
CTEC 200	General Cabinet Making (2)
CTEC 201	Upper Residential Cabinets (2)
CTEC 202	Base Residential Cabinets (2)
CTEC 203	Dedicated Use Cabinets (2)
CTEC 210	Furniture Making Laboratory - Interpreting Commercial Plans (1.5)
CTEC 211	Furniture Making Laboratory - Plan Modifications (1.5)
CTEC 212	Furniture Making Laboratory - Developing Original Plans (1.5)
CTEC 213	Furniture Making Laboratory - Building without Plans (1.5)
CTEC 220	Hinging Systems and Doors (2.5)
CTEC 221	Drawer Systems (2.5)

**Total Units: 19****Recommended Electives:**

ARCH 119	Computer Aided Architectural Drawing (3)
ARCH 150A	Construction Documentation I (3)
BUS 17	Personal Finance (3)
CADD 5	Introduction to Mechanical Drafting (3)
CTEC 95	Cooperative Work Experience Education (2-4)
CTEC 100	Building Fundamentals (4)
CTEC 110	Additions and Remodeling (4)
CTEC 222	Convenience Hardware (2.5)
CTEC 230	Cabinet Making Lab (1.5)

**Construction Technology Option:****Course Title****Required Core: 18 units**

CTEC 100	Building Fundamentals (4)
CTEC 110	Additions and Remodeling (4)
CTEC 172	Residential Electrical Wiring (4)
CTEC 180	Residential Plumbing (4)
CTEC 200	General Cabinet Making (2)

**16 units from:**

ARCH 179	Design/Build Studio (4)
CTEC 121	Concrete and Formwork (4)
CTEC 122	Rough Framing (4)
CTEC 131	Roof Framing (4)
CTEC 132	Stair Framing (4)
CTEC 141	Interior Subcrafts (4)
CTEC 142	Exterior Subcrafts (4)
CTEC 150	Contract Estimating (3)
CTEC 160	Business and Legal Aspects of Contracting (3)
CTEC 201	Upper Residential Cabinets (2)
CTEC 202	Base Residential Cabinets (2)
CTEC 203	Dedicated Use Cabinets (2)

**Total Units: 34****Recommended Electives:**

ARCH 150A	Construction Documentation I (3)
BUS 17	Personal Finance (3)
CIS 13	Computer Information Systems (3)
CTEC 95	Cooperative Work Experience Education (2-4)

**Certificates of Achievement**

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

**Cabinet and Fine Woodworking Certificate of Achievement****Course Title****Required Core: 8 units**

CTEC 200	General Cabinet Making (2)
CTEC 201	Upper Residential Cabinets (2)
CTEC 202	Base Residential Cabinets (2)
CTEC 203	Dedicated Use Cabinets (2)

**11 units from:**

CTEC 210	Furniture Making Laboratory - Interpreting Commercial Plans (1.5)
CTEC 211	Furniture Making Laboratory - Plan Modifications (1.5)
CTEC 212	Furniture Making Laboratory - Developing Original Plans (1.5)
CTEC 213	Furniture Making Laboratory - Building without Plans (1.5)
CTEC 220	Hinging Systems and Doors (2.5)
CTEC 221	Drawer Systems (2.5)
CTEC 222	Convenience Hardware (2.5)
CTEC 230	Cabinet Making Lab (1.5)

**Total Units: 19****Construction Technology Certificate of Achievement****Course Title****Required Core: 18 units**

CTEC 100	Building Fundamentals (4)
CTEC 110	Additions and Remodeling (4)
CTEC 172	Residential Electrical Wiring (4)
CTEC 180	Residential Plumbing (4)
CTEC 200	General Cabinet Making (2)

**16 units from:**

ARCH 179	Design/Build Studio (4)
CTEC 95	Cooperative Work Experience Education (2-4)
CTEC 121	Concrete and Formwork (4)
CTEC 122	Rough Framing (4)
CTEC 131	Roof Framing (4)
CTEC 132	Stair Framing (4)
CTEC 141	Interior Subcrafts (4)
CTEC 142	Exterior Subcrafts (4)
CTEC 150	Contract Estimating (3)
CTEC 160	Business and Legal Aspects of Contracting (3)
CTEC 201	Upper Residential Cabinets (2)
CTEC 202	Base Residential Cabinets (2)
CTEC 203	Dedicated Use Cabinets (2)

**Total Units: 34**

For Gainful Employment program information, please visit [www.elcamino.edu/academics/indtech/constructiontech](http://www.elcamino.edu/academics/indtech/constructiontech)

**Construction Technology 95**

(formerly 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\**

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Construction Technology field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

*\*Note: Transfer limitations apply.*

*Note: The total units earned for Cooperative Work Experience Education may not exceed 16 units.*

**Construction Technology 99**

(formerly 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\**

This course provides special advanced studies in a subject field of Construction Technology not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Construction Technology projects (54 hours per unit).

*\*Note: Transfer limitations apply.*

*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 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, drywall installation and finishing, ceramic tile setting, International Residential Code (IRC), and estimating. Practical instruction is provided in the use of tools and materials through construction laboratory work.

**Construction Technology 142****Exterior Subcrafts**

4 units; 2.5 hours lecture, 5 hours lab

Prerequisite: Construction Technology 100 or 110 with a minimum grade of C in prerequisite or equivalent

Credit, degree applicable

Transfer CSU

This is an advanced course in construction technology, covering exterior subcrafts. Topics of instruction include window installation, exterior lath, stucco application and texturing, siding, concrete blocks, International Residential Code (IRC), and estimating. Practical instruction is provided in the use of tools and materials through construction laboratory work.

**Construction Technology 150****Contract Estimating**

3 units; 3 hours lecture

Recommended Preparation: completion of 12 units of Construction Technology or a minimum of 3 years of construction work experience

Credit, degree applicable

Transfer CSU

This course is designed for those with construction backgrounds who desire to advance to a supervisory position or become contractors. Topics include: blueprint reading, International Building Code (IBC) requirements, quantity surveying and estimating, and basic financial statements.

**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.

**Construction Technology 200****General Cabinet Making**

2 units; 1 hour lecture, 3 hours lab

Credit, degree applicable

Transfer CSU

This course is one in a series of courses designed for students to develop a solid background in the fundamentals of woodworking technology. Students will learn to operate stationary woodworking equipment, hand held power tools and sanding equipment safely. Topics include lumber characteristics, gluing and clamping techniques, filing and chiseling, and fasteners. Students will fabricate free standing woodworking projects.

Note: Completion of the degree or certificate requirements qualifies students to receive a maximum of two years credit toward the California State Contractor's License for the C-6 Cabinet, Millwork and Finish Carpentry examination.

**Construction Technology 201****Upper Residential Cabinets**

2 units; 1 hour lecture, 3 hours lab

Credit, degree applicable

Transfer CSU

This course is one in a series of courses designed for students to develop a solid background in the fundamentals of woodworking technology. Topics covered include properties of wood and wood products, and the fabrication and installation of upper residential cabinets. Students will learn construction techniques and the multiple support systems used to attach wall or ceiling mounted cabinets.

Note: Completion of the degree or certificate requirements qualifies students to receive a maximum of two years credit toward the California State Contractor's License for the C-6 Cabinet, Millwork and Finish Carpentry examination.

**Construction Technology 202****Base Residential Cabinets***2 units; 1 hour lecture, 3 hours lab**Credit, degree applicable**Transfer CSU*

This course is one in a series of courses designed for students to develop a solid background in the fundamentals of woodworking technology. Topics covered include properties of wood and wood products, and the fabrication and installation of base residential cabinets. Students will learn correct construction techniques for load bearing cabinets, appropriate use of toe kicks, and use of sub tops for multiple types of counter top materials.

*Note: Completion of the degree or certificate requirements qualifies students to receive a maximum of two years credit toward the California State Contractor's License for the C-6 Cabinet, Millwork and Finish Carpentry examination.*

**Construction Technology 203****Dedicated Use Cabinets***2 units; 1 hour lecture, 3 hours lab**Credit, degree applicable**Transfer CSU*

This course is one in a series of courses designed for students to develop a solid background in the fundamentals of woodworking technology. Topics covered include properties of wood products, and fabrication and installation of residential dedicated use cabinets. Students will learn correct construction techniques for specialty cabinets such as built in oven, appliance garage, pantry, and wine storage.

*Note: Completion of the degree or certificate requirements qualifies students to receive a maximum of two years credit toward the California State Contractor's License for the C-6 Cabinet, Millwork and Finish Carpentry examination.*

**Construction Technology 210****Furniture Making Laboratory - Interpreting Commercial Plans***1.5 units; 4.5 hours lab**Prerequisite: Construction Technology 200 or 201 or 202 or 203 with a minimum grade of C or concurrent enrollment**Credit, degree applicable**Transfer CSU*

This course is one in a series of courses that will give students the opportunity to develop problem solving advanced skills in the design and fabrication of furniture with an emphasis on interpreting commercial plans. Students will learn how to read and understand furniture construction plans. Topics will include the meaning of symbols and calculations, reading dimensions, and verifying accuracy of stacked dimensions in relationship to the overall dimension. Students will produce a furniture piece without any deviation from the original plans.

*Note: Completion of the degree or certificate requirements qualifies students to receive a maximum of two years credit toward the California State Contractor's License for the C-6 Cabinet, Millwork and Finish Carpentry examination.*

**Construction Technology 211****Furniture Making Laboratory - Plan Modifications***1.5 units; 4.5 hours lab**Prerequisite: Construction Technology 200 or 201 or 202 or 203 with a minimum grade of C or concurrent enrollment**Credit, degree applicable**Transfer CSU*

This course is one in a series of courses that will give students the opportunity to develop advanced problem solving skills in the design and fabrication of furniture with an emphasis on plan modification. Students will learn how to modify an existing plan. Topics will include using Golden Mean for proper proportion, ergonomics, joinery and construction techniques to achieve a finished piece to the student's specific needs.

*Note: Completion of the degree or certificate requirements qualifies students to receive a maximum of two years credit toward the California State Contractor's License for the C-6 Cabinet, Millwork and Finish Carpentry examination.*

**Construction Technology 212****Furniture Making Laboratory - Developing Original Plans***1.5 units; 4.5 hours lab**Prerequisite: Construction Technology 200 or 201 or 202 or 203 with a minimum grade of C or concurrent enrollment**Credit, degree applicable**Transfer CSU*

This course is one in a series of courses that will give students the opportunity to develop problem solving advanced skills in the design and fabrication of furniture with an emphasis on developing original detailed plans. Students will create, draw and construct their own furniture design. Topics will require creating Bill of Materials, Plan of Procedure and wood and fastener selection.

*Note: Completion of the degree or certificate requirements qualifies students to receive a maximum of two years credit toward the California State Contractor's License for the C-6 Cabinet, Millwork and Finish Carpentry examination.*

**Construction Technology 213****Furniture Making Laboratory - Building without Plans***1.5 units; 4.5 hours lab**Prerequisite: Construction Technology 200 or 201 or 202 or 203 with a minimum grade of C or concurrent enrollment**Credit, degree applicable**Transfer CSU*

This course is one in a series of courses structured as a problem-solving approach to furniture making with an emphasis on building without plans. Abandoning formal detailed plans, students will use thumbnail sketching techniques to create a furniture design. Thumbnail sketches will be used to create a full size drawing detailing joinery and using coloring techniques to emphasize wood contrasts. Taking measurements directly from full size drawings and referencing joinery details, students will fabricate a furniture piece.

*Note: Completion of the degree or certificate requirements qualifies students to receive a maximum of two years credit toward the California State Contractor's License for the C-6 Cabinet, Millwork and Finish Carpentry examination.*

**Construction Technology 220****Hinging Systems and Doors**

2.5 units; 1.5 hours lecture, 3 hours lab

*Prerequisite:* Construction Technology 200 or 201 or 202 or 203 with a minimum grade of C or concurrent enrollment  
Credit, degree applicable

Transfer CSU

This course is the study of principles and operation of hinge mortising and insertion machine (eco-press). Topics include working with hinges, hinging plates, appropriate door construction and installation.

*Note:* Completion of the degree or certificate requirements qualifies students to receive a maximum of two years credit toward the California State Contractor's License for the C-6 Cabinet, Millwork and Finish Carpentry examination.

**Construction Technology 221****Drawer Systems**

2.5 units; 1.5 hours lecture, 3 hours lab

*Prerequisite:* Construction Technology 200 or 201 or 202 or 203 with a minimum grade of C or concurrent enrollment  
Credit, degree applicable

Transfer CSU

This course is the study of dimensioning and fabrication of drawer boxes, use and installation of slide systems, and commercial jigs and installation tools.

*Note:* Completion of the degree or certificate requirements qualifies students to receive a maximum of two years credit toward the California State Contractor's License for the C-6 Cabinet, Millwork and Finish Carpentry examination.

**Construction Technology 222****Convenience Hardware**

2.5 units; 1.5 hours lecture, 3 hours lab

*Prerequisite:* Construction Technology 200 or 201 or 202 or 203 with a minimum grade of C  
Credit, degree applicable

Transfer CSU

In this course, students learn the selection, use and installation of convenience hardware such as recycling bins, lazy susans, hampers and closet organizers. Topics include correct dimensioning and proper installation techniques unique to selected hardware.

**Construction Technology 230****Cabinet Making Lab**

1.5 units; 4.5 hours lab

*Prerequisite:* Construction Technology 200 or 201 or 202 or 203 with a minimum grade of C or concurrent enrollment  
Credit, degree applicable

Transfer CSU

This course provides students the lab time and facility to take on more challenging projects in order to maintain and continue perfecting skills acquired in other construction technology courses. Students will focus on advanced cabinet fabrication techniques including machine joinery and use of jigs and fixtures. A work plan will be developed for efficient assembly, as well as incorporating final detail work and application of finishing materials.

**Contemporary Health****Contemporary Health 1****Personal and Community Health Issues**

3 units; 3 hours lecture

*Recommended Preparation:* English 84 and English B  
Credit, degree applicable

Transfer CSU, UC\*

This course is designed to provide a critical analysis of factors, which affect personal and community health. Primary emphasis is placed upon self-empowerment and disease prevention in a culturally diverse community. General topics include infectious and non-infectious diseases; physical fitness, weight management, and nutrition; human reproduction and sexuality; stress management and mental health; drug use and abuse; and environmental health.

*Note:* This course satisfies Section A, Area 5 of the associate degrees' requirements.

\*Note: The maximum UC credit allowed for students completing Contemporary Health 1 and Contemporary Health 5 is one course.

**Contemporary Health 3****Drugs and Alcohol in Society**

2 units; 2 hours lecture

*Recommended Preparation:* eligibility for English A or English 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 5****Contemporary Women's Health**

3 units; 3 hours lecture

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

Transfer CSU, UC\*

This course is designed to investigate the many sociological, psychological, and physiological aspects related to women's health. Topics include the life challenges women face, such as body image, abuse, nutrition and exercise, sexual and reproductive health, consumerism, and mental health.

\*Note: The maximum UC credit allowed for students completing Contemporary Health 5 and Contemporary Health 1 is one course.

**Contracting****See Construction Technology**

## COSMETOLOGY

### 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 cosmetology program offers students the option to gain proficiency in hair cutting, coloring, permanent waving, chemical relaxing, manicuring, pedicuring, and facials. After completing introduction to cosmetology, Cosmetology Level I (Certificate of Accomplishment), students will have the basic skills for entry level positions as specified by the State Board of Cosmetology. Cosmetology Level II (Certificate of Achievement) will give the student intermediate skills to work in the cosmetology industry. Completion of Cosmetology Level III (Certificate of Achievement) will give students 1600 hours and prepares them to take the California State Board of Cosmetology Examination. Competencies are assessed regularly in compliance with the California State Board of Cosmetology criteria. After successful completion of the California State Board of Cosmetology Examination, students will have a state license to embark on their new career.

#### Program Costs

Students enrolling in a cosmetology class for the first time at El Camino College must purchase the Cosmetology School Kit (supplies) from the El Camino Bookstore. The cost of the kit is approximately \$1,600.

Completion of 41-42 units (1,600 hours) from the following:

Course	Title
<b>13 units from:</b>	
COSM 1	Introduction to Cosmetology Procedures (13)
or	
COSM 10	Introduction to Cosmetology I (6.5)
COSM 11	Introduction to Cosmetology II (6.5)
<b>28-29 units from:</b>	
COSM 2A	Intermediate Cosmetology (8)
COSM 2B	Advanced Cosmetology (8)
COSM 2C	Advanced Cosmetology and State Board Review (8)
COSM 3	Advanced Cosmetology Applications (5)
or	
COSM 4	Cosmetology Practicum (4)
<b>Total Units: 41-42</b>	

#### Certificate of Achievement

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

#### Cosmetology Level II Certificate of Achievement

Course	Title
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##### Completion of Level I Certificate of Accomplishment

**Required Core: 13 units**

COSM 1	Introduction to Cosmetology Procedures (13)
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or

COSM 10	Introduction to Cosmetology I (6.5)
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COSM 11	Introduction to Cosmetology II (6.5)
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**28-29 units from:**

COSM 2A	Intermediate Cosmetology (8)
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COSM 2B	Advanced Cosmetology (8)
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COSM 2C	Advanced Cosmetology and State Board Review (8)
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COSM 3	Advanced Cosmetology Applications (5)
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or

COSM 4	Cosmetology Practicum (4)
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**Total Units: 41-42**

#### Certificate of Accomplishment

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College. Completion of at least 500 hours are required.

#### Cosmetology Level I Certificate of Accomplishment

Course	Title
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**13 units from:**

COSM 1	Introduction to Cosmetology Procedures (13)
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or

COSM 10	Introduction to Cosmetology I (6.5)
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COSM 11	Introduction to Cosmetology II (6.5)
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**Total Units: 13**

For Gainful Employment program information, please visit [www.elcamino.edu/academics/indtech/cosmetology](http://www.elcamino.edu/academics/indtech/cosmetology)

**Cosmetology 1****Introduction to Cosmetology Procedures***13 units; 6 hours lecture, 30 hours lab**Recommended Preparation: eligibility for English 84**Credit, degree applicable**Transfer CSU*

This course covers the study of basic principles and practical operations of cosmetology equipment, procedures and techniques. It is designed as an intensive, multi-disciplinary lab 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 provide the basic cosmetology student with an intensive forum for development of basic cosmetology skills, techniques, safety practices, and sanitation procedures.

*Note: Cosmetology 10 and 11 can be substituted for Cosmetology 1.**Note: First time students must purchase the complete kit of supplies from the El Camino College Bookstore.***Cosmetology 2A****Intermediate Cosmetology***8 units; 3 hours lecture, 15 hours lab**Prerequisite: Cosmetology 1 or Cosmetology 10 with a minimum grade of C**Credit, degree applicable**Transfer CSU*

The intermediate principles and practical operations of cosmetology equipment, procedures and techniques will be studied. The course is designed as an intensive, multi-disciplinary workshop in the most common cosmetology processes. Lectures focus on intermediate theories of the practice of cosmetology and application. The lab supports cosmetology students with skills, techniques, safety practices, and sanitation procedures according to the California State Board of Barbering and Cosmetology. Students will be introduced to performing intermediate cosmetology procedures on clients in a salon setting.

**Cosmetology 2B****Advanced Cosmetology***8 units; 3 hours lecture, 15 hours lab**Prerequisite: Cosmetology 2A or Cosmetology 11 with a minimum grade of C or equivalent**Credit, degree applicable**Transfer CSU*

The advanced principles and practical operations of cosmetology equipment, procedures and techniques will be studied. The course is designed as an intensive, multi-disciplinary workshop in the most common cosmetology processes. Lectures focus on advanced theories of the practice of cosmetology and application. The lab is designed to support cosmetology students with skills, techniques, safety practices, and sanitation procedures according to the California State Board of Barbering and Cosmetology. Students will perform advanced cosmetology procedures on clients in a salon setting.

**Cosmetology 2C****Advanced Cosmetology and State Board Review***8 units; 3 hours lecture, 15 hours lab**Prerequisite: Cosmetology 2B or Cosmetology 11 with a minimum grade of C or equivalent**Credit, degree applicable**Transfer CSU*

This advanced course is designed to prepare students for the California State Board of Barbering and Cosmetology written and practical exams. Lectures focus on advanced cosmetology theories. Students practice for the state examination by taking mock written and practical exams. Emphasis is placed on mastery of the necessary cosmetology concepts, principles and skills on clients in a salon setting to pass the California State Licensing exam for Cosmetology.

**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 10****Introduction to Cosmetology I***6.5 units; 4 hours lecture, 14 hours lab**Credit, degree applicable**Transfer CSU*

This course is the first of a two-course introductory series covering the principles and practical operations of cosmetology techniques, procedures, and equipment for wet and thermal styling, permanent waving, chemical straightening, hair coloring, scalp treatments, manicuring and pedicuring. The course also 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.**Note: First time students must purchase the complete kit of supplies from the El Camino College Bookstore.*

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

3 units; 1.5 hours lecture, 7.5 hours lab

Prerequisite: Cosmetology 1 or Cosmetology 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 20****Introduction to Esthetician**

10 units; 5 hours lecture, 15 hours lab

Credit, degree applicable

Transfer CSU

This course is an introduction in the principles of esthetician procedures. Students are introduced to the theory and practices of esthetician applications for facial, health, safety, hair removal and makeup. The lab is designed to support the esthetician student with an extensive forum for the development of esthetician skills, techniques, safety and sanitation practices according to the California State Board of Barbering and Cosmetology.

Note: Upon completion of the esthetician program, students are expected to have a minimum of 600 hours of applied skill practice required by the State Board of Barbering and Cosmetology. Students will complete a minimum of 300 hours of esthetician training in this course.

**Cosmetology 21****Advanced Esthetician**

10 units; 5 hours lecture, 15 hours lab

Prerequisite: Cosmetology 20 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

This is an advanced course in the principles of esthetician procedures. Students are given advanced theory and practical practices in facials, preparation, health, safety, laws, regulations, disinfectant, sanitation, anatomy, physiology, hair removal, and makeup. State Board of Barbering and Cosmetology exam practices will be emphasized.

Note: When enrolling into this course students must have a minimum of 300 hours completed. Upon completion of this course, students are expected to have a minimum of 600 hours of applied skill practice required by the State Board of Barbering and Cosmetology.

**Cosmetology 95**

(formerly 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\*

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Cosmetology field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

\*Note: Transfer limitations apply.

Note: The total units earned for Cooperative Work Experience Education may not exceed 16 units.

**Cosmetology 99**

(formerly 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

Transfer CSU\*

This course provides special advanced studies in a subject field of Cosmetology not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Cosmetology projects (54 hours per unit).

\*Note: Transfer limitations apply.

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

**Criminal Justice**

See Administration of Justice

## DANCE

### 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 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.

#### Course Title

##### Theory: 10 units

DANC 103	History of Dance in the 20th Century (3)
DANC 105	Music for Dance (2)
DANC 170	Improvisation (2)
DANC 250	Pilates Mat Class (3)

##### Choreography: 4 units

DANC 271A	Intermediate Choreography A (2)
DANC 271B	Intermediate Choreography B (2)

##### Ballet Technique: 6 units

DANC 220A	Intermediate Ballet A (2)
DANC 220B	Intermediate Ballet B (2)
DANC 221	Ballet Variations (2)

##### Modern Dance Technique: 4 units

DANC 230A	Intermediate Modern Dance A (2)
DANC 230B	Intermediate Modern Dance B (2)

#### Performance: 4 units

DANC 183ab*	Dance Workshop Ensemble (1)
DANC 287ab**	Concert Dance Ensemble (1)
DANC 289ab	Advanced Dance Theatre (1)

#### Electives: 2 units

DANC 110	Beginning Dance (2)
DANC 140***	Jazz Dance I (2)
DANC 161	Tap Dance I – Beginning (1)
DANC 162	Hip Hop Dance (2)
DANC 164	World Dance (1)
DANC 165	African Dance (1)
DANC 167	Social and Ballroom Dance
DANC 168	Latin Social Dance (2)
DANC 240***	Jazz Dance II (2)
DANC 261	Tap Dance II – Intermediate (2)
DANC 262	Commercial Dance (2)
DANC 265	Intermediate African Dance (2)
DANC 268	Intermediate Latin Social Dance (2)

#### Total Units: 30

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

\* No more than 3 units of Dance 183ab may be counted for the major.

\*\* Students are advised that at least one semester of Dance 287ab is required for transfer students.

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

#### Preparation for the Dance Transfer Major

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

### Dance 99

(formerly 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\*

This course provides special advanced studies in a subject field of Dance not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Dance projects (54 hours per unit).

\*Note: Transfer limitations apply.

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

### Dance 101

(formerly Dance 1)

#### Dance Appreciation

3 units; 3 hours 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 103**

(formerly Dance 3)

***History of Dance in the 20th Century****3 units; 3 hours lecture**Recommended Preparation: Dance 110 or 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 105**

(formerly 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 110**

(formerly 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 pass/no pass option.***Dance 120A**

(formerly Dance 32ab)

***Beginning Ballet A****2 units; 1 hour lecture, 3 hours lab**Recommended Preparation: Dance 110**Credit, degree applicable**Transfer CSU, UC*

This course is the first in a sequence of two levels of ballet. This course will reinforce basic barre and center work ballet skills and is required of all dance majors. Attendance is required at selected dance events.

*Note: Letter grade or pass/no pass option.***Dance 120B*****Beginning Ballet B****2 units; 1 hour lecture, 3 hours lab**Prerequisite: Dance 120A with a minimum grade of C**Credit, degree applicable**Transfer CSU, UC*

This course is the second of two levels of Ballet Technique I and is applicable to the dance major. Barre and center work will expand upon skills learned in the first ballet technique course. Emphasis will be on simple allegro and adagio combinations. Attendance at selected dance events is required.

*Note: Letter grade or pass/no pass option.***Dance 130A**

(formerly Dance 42ab)

***Beginning Modern Dance A****2 units; 1 hour lecture, 3 hours lab**Recommended Preparation: Dance 110 or equivalent and English A**Credit, degree applicable**Transfer CSU, UC*

This course is the first in a sequence of four levels of modern dance. It focuses on the development of dance skills through modern dance movement, emphasizing combinations on the floor and standing or traveling through space. Creative expression is included through exploration of dance skills. Attendance is required at selected dance events.

*Note: Letter grade or pass/no pass option.***Dance 130B*****Beginning Modern Dance B****2 units; 1 hour lecture, 3 hours lab**Prerequisite: Dance 130A**Credit, degree applicable**Transfer CSU, UC*

This course is the second in a sequence of four levels of modern dance. This class focuses on the continued development of dance skills through modern dance movement, emphasizing combinations on the floor and standing or traveling through space. Technique skills are reinforced through creative expression of more complex movement. Attendance is required at dance events sponsored by the Center for the Arts.

*Note: This course is required of all dance majors.**Note: Letter grade or pass/no pass option.***Dance 140**

(formerly Dance 22ab)

***Jazz Dance I****2 units; 1 hour lecture, 3 hours lab**Recommended Preparation: Dance 110 or equivalent**Credit, degree applicable**Transfer CSU, UC*

This course is the first in a sequence of two levels of jazz dance. This course includes work on centering, turns, timing, flexibility, and strength training. Attendance is required at selected dance events.

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


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

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**Dance 161**

(formerly 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 162**

(formerly 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 pass/no pass option.*

**Dance 164**

(formerly 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 165**

(formerly 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 pass/no pass option.*

**Dance 167**

(formerly 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 168**

(formerly 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 pass/no pass option.*

**Dance 170**

(formerly 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 pass/no pass option.*

**Dance 171A**

(formerly Dance 171)

**Beginning Choreography A**

2 units; 1 hour lecture, 3 hours lab

*Prerequisite: Dance 110 and Dance 170 with a minimum grade of C; Dance 170 may be taken concurrently with Dance 171*

Credit, degree applicable

Transfer CSU, UC

This course is an introduction to fundamental skills and concepts of choreography with an emphasis on utilizing movement for solo and duets in creating dances. Attendance at selected dance events is required.

**Dance 171B****Beginning Choreography B**

2 units; 1 hour lecture, 3 hours lab

*Prerequisite: Dance 171A with a minimum grade of C*

Credit, degree applicable

Transfer CSU, UC

This course is a continuation of Choreography 171A with exploration of movement extended to small group choreography. Emphasis is on the development from solo and duet work to trio and quartets. Attendance at selected dance events is required.

**Dance 183ab**

(formerly Dance 183abcd)

**Dance Workshop Ensemble**

1 unit; 4 hours lab per week to be arranged

Corequisite: enrollment in one of the following courses:

Dance 110, 120A, 130A, 140, 161, 165, 168, 220A, 221, 230A, 240, 261, 262, 265, 268

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.

**Dance 220A**

(formerly Dance 33abcd)

**Intermediate Ballet A**

2 units; 1 hour lecture, 3 hours lab

Prerequisite: Dance 120B with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC

This course is the second of two levels of ballet offered and is applicable to the dance major. Barre and center work will expand upon skills learned in Ballet I. Emphasis will be on complexity in allegro and adagio combinations. Students will perform variations from the classical repertoire. Attendance is required at selected dance events.

Note: Letter grade or pass/no pass option.

**Dance 220B****Intermediate Ballet B**

2 units; 1 hour lecture, 3 hours lab

Prerequisite: Dance 220A with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course is the last in a series of four ballet courses and is applicable to the dance major. Barre and center work will expand upon skills learned in Dance 220A. Emphasis will be on complexity in allegro and adagio combinations. Students will perform variations from the classical repertoire. Attendance is required at selected dance events.

Note: Letter grade or pass/no pass option.

**Dance 221**

(formerly Dance 35abcd)

**Ballet Variations**

2 units; 1 hour lecture, 3 hours lab

Prerequisite: Dance 120A with a minimum grade of C

Recommended Preparation: Dance 220A

Credit, degree applicable

Transfer CSU, UC

This course continues the development of technical skills for ballet dance and emphasizes artistic expression through exposure to classical and contemporary ballet variations including partnering and dancing en Pointe. Attendance at selected dance events is required.

Note: Letter grade or pass/no pass option.

**Dance 230A**

(formerly Dance 43abcd)

**Intermediate Modern Dance A**

2 units; 1 hour lecture, 3 hours lab

Prerequisite: Dance 130B with a minimum grade of C or equivalent

Recommended Preparation: English A

Credit, degree applicable

Transfer CSU, UC

This modern dance course is the third in a series of four levels. This is an intermediate/advanced level class that further develops the student's ability to use the body as an instrument of expression, with emphasis on performance skills, technique related to specific modern dance styles, and dance as a concert art form. Attendance at selected dance events is required.

Note: Letter grade or pass/no pass option.

**Dance 230B****Intermediate Modern Dance B**

2 units; 1 hour lecture, 3 hours lab

Prerequisite: Dance 230A with a minimum grade of C

Recommended Preparation: English A

Credit, degree applicable

Transfer CSU, UC

This course is the fourth in a sequence of four levels of modern dance. This class further develops the student's ability to use the body as an instrument of expression, with emphasis on advanced performance skills, technique related to specific modern dance styles, and dance as a concert art form. Attendance at selected dance events at El Camino College sponsored by the Center of the Arts is required.

**Dance 240**

(formerly Dance 23abcd)

**Jazz Dance II**

2 units; 1 hour lecture, 3 hours lab

Prerequisite: Dance 140 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC

This course is a continuation of Jazz Dance I with increased emphasis on ease of performance, projection, speed of learning and development of individual style. It will concentrate on dance terminology and techniques required for success in professional auditions. This course is highly recommended for those seeking a career in dance performance or related theatrical fields. Attendance is required at selected dance events.

Note: Letter grade or pass/no pass option.

**Dance 250**

(formerly Dance 21abcd)

**Pilates Mat Class**

3 units; 2 hour lecture, 3 hours lab

Credit, degree applicable

Transfer CSU, UC

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

Note: Letter grade or pass/no pass option.

**Dance 261**

(formerly Dance 62abcd)

**Tap Dance II – Intermediate**

2 units; 1 hour lecture, 3 hours lab

Prerequisite: Dance 161 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC

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

**Dance 262**

(formerly Dance 25abcd)

**Commercial Dance**

2 units; 1 hour lecture, 3 hours lab

Prerequisite: Dance 240 with a minimum grade of C

Recommended Preparation: Dance 120A

Credit, degree applicable

Transfer CSU, UC

This course is designed for those attending commercial auditions on a regular basis and emphasizes movement for commercial dance work used in motion pictures, concert dance, television, industrial shows, and other commercial applications. It offers instruction in current trends in popular dance, jazz styling, and commercial audition preparation. Attendance is required at selected dance events.

Note: Letter grade or pass/no pass option.

**Dance 265**

(formerly Dance 17abcd)

**Intermediate African Dance**

2 units; 1 hour lecture, 3 hours lab

Prerequisite: Dance 165 with a minimum grade of C

Recommended Preparation: Dance 130A or Dance 140

Credit, degree applicable

Transfer CSU, UC

As a continuation of African Dance, this course will introduce new movement patterns focusing on technical skills and traditional dances that are found in African dance. The class will also explore Dunham Technique as a means for providing a basic foundation in African dance, focusing on torso movements, isolations, and feet movements. Attendance is required at selected dance events.

Note: Letter grade or pass/no pass option.

**Dance 268**

(formerly Dance 52abcd)

**Intermediate Latin Social Dance**

2 units; 1 hour lecture, 3 hours lab

Prerequisite: Dance 168 with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course builds on the basic vocabulary and steps of the Latin social dances including salsa, cha cha, tango, rumba, samba, mambo, and selected folk and regional dances. Areas of study include movement theory, dance vocabulary, dance courtesy, and musical rhythms as they relate to dance and dance history. Students will be exposed to vintage dance forms as well as current trends. Attendance is required at selected events.

Note: Letter grade or pass/no pass option.

**Dance 271A**

(formerly Dance 271)

**Intermediate Choreography A**

2 units; 1 hour lecture, 3 hours lab

Prerequisite: Dance 171B with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC

In this course, students further develop choreographic concepts and skills from Dance 171B. Methods of expanding initial movement concepts from small group to large group composition are also emphasized. Attendance at selected dance events is required.

**Dance 271B****Intermediate Choreography B**

2 units; 1 hour lecture, 3 hours lab

Prerequisite: Dance 271A with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

In this course, students will further develop choreographic concepts and skills learned in Dance 271A. Methods for expanding concepts from small groups to larger group compositions will be explored while using solo and duet composition within large ensembles. This is an advanced level of choreographic development that incorporates and synthesizes all beginning and intermediate skill levels learned. Attendance at selected dance events is required.

**Dance 287ab**

(formerly Dance 287abcd)

**Concert Dance Ensemble**

1 unit; 4 hours lab per week to be arranged

Enrollment Limitation: audition

Recommended Preparation: Intermediate/advanced level of technique in ballet, modern, and jazz

Credit, degree applicable

Transfer CSU, UC

This course offers students an opportunity to participate in a concert dance production in a capacity to be determined by the abilities of the individual and the demands of the choreography.

**Dance 289ab**

(formerly Dance 289abcd)

**Advanced Dance Theatre**

1 unit; 4 hours lab per week to be arranged

Enrollment Limitation: audition

Recommended Preparation: Dance 183ab

Credit, degree applicable

Transfer CSU, UC

In this course, students organize production elements and rehearse as performing members of a dance company. Dance performance techniques and artistic skills are emphasized. Choreography is by faculty, guest artists, or advanced level dance students. Emphasis is also given to preparation for pre-professional auditions.

**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.

#### Course Title

**Required Core: 13-16 units**

ECON 1	Principles of Economics: Macroeconomics (3)
ECON 2	Principles of Economics: Microeconomics Theory (3)
MATH 160	Calculus I for the Biological, Management and Social Sciences (4)
and	
MATH 161	Calculus II for the Biological, Management and Social Sciences (3)
or	
MATH 190	Single Variable Calculus and Analytic Geometry I (5)
and	
MATH 191	Single Variable Calculus and Analytic Geometry II (5)

**6 units from:**

HIST 101	United States History to 1877 (3)
HIST 102	United States History from 1877 to the Present (3)
HIST 140	History of Early Civilizations (3)
HIST 141	History of Modern Civilizations (3)
POLI 1	Governments of the United States and California (3)

**Total Units: 19-22**

#### Preparation for the Economics Transfer Major

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

## ECONOMICS

### AA-T 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.

The Associate in Arts for Transfer (AA-T) is intended for students who plan to complete a bachelor's degree in Economics or similar major at a CSU campus. Students completing the AA-T are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AA-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AA-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AA-T.

#### **Course Title**

##### **Required Core: 14-15 units**

ECON 1	Principles of Economics: Macroeconomics (3)
ECON 2	Principles of Economics: Microeconomics Theory (3)
MATH 150	Elementary Statistics for Probability (4)
MATH 160	Calculus I for the Biological, Management and Social Sciences (4)
or	
MATH 190	Single Variable Calculus and Analytic Geometry I (5)

##### **List A: 3-5 units**

BUS 1A	Financial Accounting (4)
BUS 1B	Managerial Accounting (4)
BUS 28	Written Business Communications (3)
CIS 13	Computer Information Systems (3)
MATH 140	Finite Mathematics for Business and Social Sciences (4)
MATH 191	Single Variable Calculus and Analytic Geometry II (5)

##### **List B: 3-5 units**

##### **Any course from List A not already completed**

ECON 5	Fundamentals of Economics (3)
MATH 220	Multi-Variable Calculus (5)
MATH 270	Differential Equations with Linear Algebra (5)

**Total Units: 20-25**

### 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 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*

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 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.

**Education****Education 101***Introduction to the Field of Education**1 unit; 1 hour lecture**Recommended Preparation: eligibility for English 1A**Credit, degree applicable**Transfer CSU, UC*

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

**Education 201***Foundations in Education**3 units; 3 hours lecture**Prerequisite: Education 101 with a minimum grade of C and eligibility for English 1A**Credit, degree applicable**Transfer CSU, UC*

This course introduces students to concepts and issues related to teaching children with diverse backgrounds in preschool through grade twelve. Course topics include teaching as a profession and career, contemporary educational issues, California's content and performance standards, and credential requirements. Throughout the course, students will contribute materials to their portfolios and will also conduct a minimum of 45 hours of pre-approved, structured fieldwork in diverse classroom settings.

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

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**Educational Development****Educational Development 8**

(formerly 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 appropriate for students with disabilities.**Note: Pass/no pass only.***Educational Development 9**

(formerly 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 8**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 10**

(formerly Educational Development 10abcd)

*English Grammar for Deaf and Hard-of-Hearing Students**2 units; 2 hours lecture, 2 hour lab**Credit, not degree applicable*

This course introduces deaf and hard-of-hearing students to the basic principles of grammar, sentence structure, and vocabulary. Students will develop clear, concise sentences and write short paragraphs.

*Note: This course is taught in American Sign Language and designed for students who are deaf and hard-of-hearing.**Note: Pass/no pass only.*

**Educational Development 11**

(formerly Educational Development 11abcd)

***Writing and Reading for Deaf and Hard-of-Hearing Students****2 units; 2 hours lecture, 2 hours lab**Credit, not degree applicable*

This is a comprehensive writing and reading course for deaf and hard-of-hearing students. It incorporates the use of the writing process, developing writing skills, building basic reading skills and vocabulary development. Students will write in response to selected short stories and personal experiences presented in the sign language. Emphasis is placed on the development of efficient writing and reading skills that include pre-reading strategies, making inferences, using contextual clues and identifying the main idea.

*Note: This course is taught in American Sign Language and designed for students who are deaf and hard-of-hearing.*

*Note: Pass/no pass only.*

**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 32**

(formerly 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 33**

(formerly 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 35**

(formerly 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: This course is appropriate for students with disabilities.*

*Note: Pass/no pass only.*

**Educational Development 36**

(formerly 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 37*****Increased Learning Performance: English****1 unit; 3 hours lab*

*Enrollment Limitation: concurrent enrollment in an El Camino College English course*

*Credit, not degree applicable*

In this laboratory course, students will increase learning performance and study skills which relate to content of other El Camino College English courses. Students will enhance their critical thinking and time management skills. Students will evaluate appropriate campus resources and assistive technologies which may promote academic success in reading and writing courses.

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

*Note: Pass/no pass only.*

**Educational Development 38****Increased Learning Performance: Mathematics**

1 unit; 3 hours lab

*Enrollment Limitation: concurrent enrollment in an El Camino College Mathematics course**Credit, not degree applicable*

In this laboratory course, students will increase learning performance and study skills which relate to content of the El Camino College Mathematics course in which the student is concurrently enrolled. Students will enhance their critical thinking and time management skills. Students will evaluate appropriate campus resources and assistive technologies which promote academic success in math.

*Note: This course is appropriate for students with disabilities.**Note: Pass/no pass only.***Educational Development 41**

(formerly Educational Development 41abcd)

**Assistive Computer Technology Laboratory**

1 unit; 3 hours lab per week to be arranged

*Recommended Preparation: basic computer literacy skills and ability to type 5 words per minute**Credit, not degree applicable*

This computer laboratory course is designed to enhance computer skills of students with disabilities. Students will select disability specific programs and/or assistive technology suited to their particular needs and will improve their skills and competencies in personal computer usage.

*Note: Pass/no pass only.***Educational Development 121**

(formerly 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 122**

(formerly 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 140**

(formerly 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 pass/no pass option.**Note: This course is appropriate for students with disabilities.*

## 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 offers various certificate and degree options for those individuals who want to either upgrade their skills or explore career opportunities. Students acquire proficiencies in foundations of electronics and computer hardware and systems applications. Emphasis is placed on the use of modern electronic test equipment, circuit simulation software, and experimentation structured in an industrial lab setting. Electronics and computer hardware technology systems provide instruction from basic system configuration to large scale computer integration and analysis. Students may pursue industrial certifications after completing as few as three courses in Electronics and Computer Hardware Technology.

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

#### Computer Technology Option:

Course	Title
<b>Required Core: 24 units</b>	
ECHT 11	Introduction to Electronics (3)
ECHT 22	Basic Electronic Fabrication (3)
ECHT 110	Introduction to Direct and Alternating Current Circuits (3)
ECHT 130	Digital Systems and Computer Logic I (3)
ECHT 140	Computer Systems and Hardware Technologies I (4)
ECHT 142	Computer Systems and Hardware Technologies II (4)
ECHT 144	CompTIA A+ Certification Preparation for Computer Hardware Systems (4)
<b>two courses from:</b>	
ECHT 95	Cooperative Work Experience Education (2-4)
ECHT 191	Introduction to Microprocessors and Interfacing (3)
CIS 13	Computer Information Systems (3)
CIS 40	Personal Computer Operations (3)
<b>Total Units: 29-31</b>	

#### Electronics Technology Option:

Course	Title
<b>Required Core: 25 units</b>	
ECHT 11	Introduction to Electronics (3)
ECHT 22	Basic Electronic Fabrication (3)
ECHT 110	Introduction to Direct and Alternating Current Circuits (3)
ECHT 120	Semiconductor Circuits I (3)
ECHT 122	Semiconductor Power Devices (3)
ECHT 124	Operational Amplifiers and Linear Integrated Circuits (3)
ECHT 130	Digital Systems and Computer Logic I (3)
ECHT 140	Computer Systems and Hardware Technologies I (4)
<b>one course from:</b>	
ECHT 95	Cooperative Work Experience Education (2-4)
ECHT 142	Computer Systems and Hardware Technologies II (4)
ECHT 144	CompTIA A+ Certification Preparation for Computer Hardware Systems (4)
ECHT 191	Introduction to Microprocessors and Interfacing (3)
<b>Total Units: 27-29</b>	

#### **Certificates of Achievement**

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

#### **Computer Hardware Electronics Technician Certificate of Achievement**

Course	Title
<b>Required Core: 24 units</b>	
ECHT 11	Introduction to Electronics (3)
ECHT 22	Basic Electronic Fabrication (3)
ECHT 110	Introduction to Direct and Alternating Current Circuits (3)
ECHT 130	Digital Systems and Computer Logic I (3)
ECHT 140	Computer Systems and Hardware Technologies I (4)
ECHT 142	Computer Systems and Hardware Technologies II (4)
ECHT 144	CompTIA A+ Certification Preparation for Computer Hardware Systems (4)
<b>two courses from:</b>	
ECHT 95	Cooperative Work Experience Education (2-4)
ECHT 191	Introduction to Microprocessors and Interfacing (3)
CIS 13	Computer Information Systems (3)
CIS 40	Personal Computer Operations (3)
<b>Total Units: 29-31</b>	

**Electronics Engineering Technician Certificate of Achievement****Course Title****Required Core: 22 units**

ECHT 11	Introduction to Electronics (3)
ECHT 22	Basic Electronic Fabrication (3)
ECHT 110	Introduction to Direct and Alternating Current Circuits (3)
ECHT 120	Semiconductor Circuits I (3)
ECHT 124	Operational Amplifiers and Linear Integrated Circuits (3)
ECHT 130	Digital Systems and Computer Logic I (3)
ECHT 140	Computer Systems and Hardware Technologies I (4)

**two courses from:**

ECHT 95	Cooperative Work Experience Education (2-4)
ECHT 142	Computer Systems and Hardware Technologies II (4)
ECHT 144	CompTIA A+ Certification Preparation for Computer Hardware Systems (4)
ECHT 191	Introduction to Microprocessors and Interfacing (3)

**Total Units: 27-30****Certificates of Accomplishment**

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

**CompTIA Computer Hardware Technician Certificate of Accomplishment****Course Title**

ECHT 144	CompTIA A+ Certification Preparation for Computer Hardware Systems (4)
ECHT 146	CompTIA Network+ Certification Preparation for Computer Hardware Systems (4)
ECHT 148	CompTIA Security+ Certification Preparation for Computer Hardware Systems (4)

**Total Units: 12**

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

**Computer Hardware Technician Certificate of Accomplishment****Course Title**

ECHT 11	Introduction to Electronics (3)
ECHT 140	Computer Systems and Hardware Technologies I (4)
ECHT 142	Computer Systems and Hardware Technologies II (4)
ECHT 144	CompTIA A+ Certification Preparation for Computer Hardware Systems (4)

**Total Units: 15****Electronics Technician Certificate of Accomplishment****Course Title**

ECHT 11	Introduction to Electronics (3)
ECHT 22	Basic Electronic Fabrication (3)
ECHT 110	Introduction to Direct and Alternating Current Circuits (3)
ECHT 120	Semiconductor Circuits I (3)
ECHT 140	Computer Systems and Hardware Technologies I (4)

**Total Units: 16****Robotics Certificate of Accomplishment****Course Title**

ECHT 11	Introduction to Electronics (3)
ECHT 22	Basic Electronic Fabrication (3)
ECHT 130	Digital Systems and Computer Logic I (3)
ECHT 191	Introduction to Microprocessors and Interfacing (3)

**Total Units: 12**

For Gainful Employment program information, please visit [www.elcamino.edu/academics/indtech/electronics](http://www.elcamino.edu/academics/indtech/electronics)

**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 95**

(formerly 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\**

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Electronics and Computer Hardware Technology field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

*\*Note: Transfer limitations apply.**Note: The total units earned for Cooperative Work Experience Education may not exceed 16 units.***Electronics and Computer Hardware Technology 99**

(formerly 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\**

This course provides special advanced studies in a subject field of Electronics and Computer Hardware Technology not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Electronics and Computer Hardware Technology projects (54 hours per unit).

*\*Note: Transfer limitations apply.**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 principles of direct and alternating current electricity through the correlation of theory and laboratory experiments. Basic circuit analysis forms the core of the course. Included in this class are the use of calculators, computer circuit simulation and many types of electrical/electronic test equipment to perform electrical measurements, and yield analysis.

**Electronics and Computer Hardware Technology 120****Semiconductor Circuits I***3 units; 2 hours lecture, 4 hours lab**Recommended Preparation: Electronics and Computer Hardware Technology 11 or equivalent**Credit, degree applicable**Transfer CSU*

This course provides the student with a background in modern solid-state devices for electronic technician work or troubleshooting. Emphasis is placed on testing devices, combined with study of typical applications. The course of study includes the student construction of an Amplitude Modulation AM radio and experience with computer simulation of laboratory experimentation.

**Electronics and Computer Hardware Technology 122****Semiconductor Power Devices***3 units; 2 hours lecture, 4 hours lab**Recommended Preparation: Electronics and Computer Hardware Technology 11 or equivalent**Credit, degree applicable**Transfer CSU*

This course gives the student an advanced background in solid-state devices such as transistors, Field Effect Transistors (FETs) and Silicon Controlled Rectifiers (SCRs). Practical laboratory experience similar to circuitry used in the electronics industry is included.

**Electronics and Computer Hardware Technology 124****Operational Amplifiers and Linear Integrated Circuits***3 units; 2 hours lecture, 4 hours lab**Recommended Preparation: Electronics and Computer Hardware Technology 11 or equivalent**Credit, degree applicable**Transfer CSU*

This course focuses on linear integrated circuit techniques, including operational amplifiers, comparators, phase locked loops, multiplexers and audio amplifiers. Laboratory activities include telecommunications, instrumentation, industrial electronics and practical measurement methods. In both lecture and laboratory exercises, students study circuits common to electronic systems, in addition to new, novel and useful circuit concepts.

**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 140*****Computer Systems and Hardware Technologies I****4 units; 3 hours lecture, 4 hours lab**Recommended Preparation: Electronics and Computer Hardware Technology 11 and Computer Information Systems 13 or equivalent**Credit, degree applicable**Transfer CSU*

This course provides a general study of computer hardware systems and their underlying operating technologies. Topics covered include an overview of microprocessor-based computer systems, binary and hexadecimal numbering systems, computer system hardware components and peripherals, operating systems, basic hardware failures, and test and verification of proper computer systems operation. Students work in teams to develop analytical skills and techniques.

*Note: Letter grade or pass/no pass option.***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 140 with a minimum grade of C**Credit, degree applicable**Transfer CSU*

This course provides a comprehensive study of advanced computer hardware systems and associated technologies. Topics will include an in-depth analysis of microprocessor-based architectures and their related computer hardware system components and peripheral devices. Installation and configuration of the system hardware, advanced hardware and software integration skills, including conflict resolution, troubleshooting and optimization strategies will be taught.

*Note: Letter grade or pass/no pass option.***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 140 with a minimum grade of C**Credit, degree applicable**Transfer CSU*

This course is designed for the student pursuing a career as a computer service technician. Students will develop the skills and knowledge required for passing the CompTIA A+ Certification Core Hardware exam. Topics covered include safety, basics of electricity and electronics, microcomputer hardware and components, Complementary Metal Oxide Semiconductor (CMOS) settings, printers, portable systems and network hardware.

*Note: Letter grade or pass/no pass option.***Electronics and Computer Hardware Technology 146**

(formerly Electronics and Computer Hardware Technology 146ab)

***CompTIA Network+ Certification Preparation for Computer Hardware Systems****4 units; 3 hours lecture, 4 hours lab**Prerequisite: Electronics and Computer Hardware Technology 140 with a minimum grade of C**Credit, degree applicable**Transfer CSU*

This course is designed for the student pursuing a career as a computer service technician. Students will develop the skills and knowledge required for passing the CompTIA Network+ Certification exam. Topics include set up configuration and troubleshooting of networking hardware devices. Other areas explored include networking topology, cabling, wireless devices, network standards, protocols and security.

*Note: Letter grade or pass/no pass option.***Electronics and Computer Hardware Technology 148**

(formerly Electronics and Computer Hardware Technology 148ab)

***CompTIA Security+ Certification Preparation for Computer Hardware Systems****4 units; 3 hours lecture, 4 hours lab**Prerequisite: Electronics and Computer Hardware Technology 140 with a minimum grade of C**Credit, degree applicable**Transfer CSU*

This course is designed for the student pursuing a career as a computer service technician. Students will develop the skills and knowledge required for passing the CompTIA Security+ Certification exam. Topics include information security, system threats and risks, protecting systems, network vulnerabilities, network defenses, wireless network security, security audits and policies, cryptographic methods, and the basics of computer forensics.

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

## 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 130 or Engineering Technology 14 or Manufacturing Technology 70 with a minimum grade of C*

*Credit, degree applicable*

*Transfer CSU*

This course is an introduction to industrial microprocessors (microcontrollers) as they relate to industrial and consumer equipment. Included are the fundamentals of assembly language, use of software to simulate hardware, digital and analog interfacing, data storage, and troubleshooting.

## Elementary School Teaching See Liberal Studies

## 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 energy methods.

## 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.

At least 50 percent of the requirements for the major must be completed at El Camino College.

### Engineering Technician Option:

Course	Title
<i>Required Core: 16 units</i>	
ETEC 10	Principles of Engineering Technology (3)
or	
ETEC 10A	Principles of Engineering Technology I (1.5)
and	
ETEC 10B	Principles of Engineering Technology II (1.5)
ETEC 12	Introduction to Engineering Design (3)
or	
ETEC 12A	Introduction to Engineering Design I (1.5)
and	
ETEC 12B	Introduction to Engineering Design II (1.5)
ETEC 14	Electronics for Engineering Technologists (3)
or	
ETEC 14A	Electronics for Engineering Technologists I (1.5)
and	
ETEC 14B	Electronics for Engineering Technologists II (1.5)
ETEC 16	Computer Integrated Manufacturing (3)
or	
ETEC 16A	Computer Integrated Manufacturing I (1.5)
and	
ETEC 16B	Computer Integrated Manufacturing II (1.5)
MTT 101	Introduction to Conventional and CNC Machining (4)

**5-9 units from:**

ETEC 15	Aerospace Engineering (3)
or	
ETEC 15A	Aerospace Engineering I (1.5)
and	
ETEC 15B	Aerospace Engineering II (1.5)
ETEC 18	Engineering Design and Development (3)
or	
ETEC 18A	Engineering Design and Development I (1.5)
and	
ETEC 18B	Engineering Design and Development II (1.5)
MTT 16	General Metals (3)
CADD 28	Parametric Three Dimensional (3D) Modeling and Assemblies (2)
ECHT 22	Basic Electronic Fabrication (3)
MTEC 70	Basic Robotics (2)
MTEC 75A	Integrated Robotic and Automated Technologies I (1.5)
and	
MTEC 75B	Integrated Robotic and Automated Technologies II (1.5)
WELD 15	Basic Welding for Allied Fields (3)

**Total Units: 21-25****Engineering Technology Option:****Course Title****Required Core: 26 units**

ETEC 10	Principles of Engineering Technology (3)
or	
ETEC 10A	Principles of Engineering Technology I (1.5)
and	
ETEC 10B	Principles of Engineering Technology II (1.5)
ETEC 12	Introduction to Engineering Design (3)
or	
ETEC 12A	Introduction to Engineering Design I (1.5)
and	
ETEC 12B	Introduction to Engineering Design II (1.5)
ETEC 14	Electronics for Engineering Technologists (3)
or	
ETEC 14A	Electronics for Engineering Technologists I (1.5)
and	
ETEC 14B	Electronics for Engineering Technologists II (1.5)
ETEC 16	Computer Integrated Manufacturing (3)
or	
ETEC 16A	Computer Integrated Manufacturing I (1.5)

and	
ETEC 16B	Computer Integrated Manufacturing II (1.5)
CHEM 1A	General Chemistry I (5)
MATH 190	Single Variable Calculus and Analytic Geometry I (5)
PHYS 2A	General Physics (4)

**3-7 units from:**

CIS 13	Computer Information Systems (3)
ECHT 110	Introduction to Direct and Alternating Current Circuits (3)
ENGR 1	Introduction to Engineering (2)
ENGR 9	Engineering Mechanics – Statics (3)
ETEC 15	Aerospace Engineering (3)
or	
ETEC 15A	Aerospace Engineering I (1.5)
and	
ETEC 15B	Aerospace Engineering II (1.5)
ETEC 18	Engineering Design and Development (3)
or	
ETEC 18A	Engineering Design and Development I (1.5)
and	
ETEC 18B	Engineering Design and Development II (1.5)
MTT 101	Introduction to Conventional and CNC Machining (4)
MTEC 70	Basic Robotics (2)
MTEC 75A	Integrated Robotic and Automated Technologies I (1.5)
and	
MTEC 75B	Integrated Robotic and Automated Technologies II (1.5)

**Total Units: 29-33****Certificates of Achievement**

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

**Engineering Technician Certificate of Achievement****Course Title****Required Core: 16 units**

ETEC 10	Principles of Engineering Technology (3)
or	
ETEC 10A	Principles of Engineering Technology I (1.5)
and	
ETEC 10B	Principles of Engineering Technology II (1.5)
ETEC 12	Introduction to Engineering Design (3)
or	
ETEC 12A	Introduction to Engineering Design I (1.5)

and  
 ETEC 12B Introduction to Engineering Design II (1.5)  
 ETEC 14 Electronics for Engineering Technologists (3)  
 or  
 ETEC 14A Electronics for Engineering Technologists I (1.5)  
 and  
 ETEC 14B Electronics for Engineering Technologists II (1.5)  
 ETEC 16 Computer Integrated Manufacturing (3)  
 or  
 ETEC 16A Computer Integrated Manufacturing I (1.5)  
 and  
 ETEC 16B Computer Integrated Manufacturing II (1.5)  
 MTT 101 Introduction to Conventional and CNC Machining (4)  
**5-9 units from:**  
 ETEC 15 Aerospace Engineering (3)  
 or  
 ETEC 15A Aerospace Engineering I (1.5)  
 and  
 ETEC 15B Aerospace Engineering II (1.5)  
 ETEC 18 Engineering Design and Development (3)  
 or  
 ETEC 18A Engineering Design and Development I (1.5)  
 and  
 ETEC 18B Engineering Design and Development II (1.5)  
 MTT 16 General Metals (3)  
 CADD 28 Parametric Three Dimensional (3D) Modeling and Assemblies (2)  
 ECHT 22 Basic Electronic Fabrication (3)  
 MTEC 70 Basic Robotics (2)  
 MTEC 75A Integrated Robotic and Automated Technologies I (1.5)  
 and  
 MTEC 75B Integrated Robotic and Automated Technologies II (1.5)  
 WELD 15 Basic Welding for Allied Fields (3)  
**Total Units: 21-25**

**Engineering Technology Certificate of Achievement**

**Course Title**  
*Required Core: 26 units*

ETEC 10 Principles of Engineering Technology (3)  
 or  
 ETEC 10A Principles of Engineering Technology I (1.5)  
 and

ETEC 10B Principles of Engineering Technology II (1.5)  
 ETEC 12 Introduction to Engineering Design (3)  
 or  
 ETEC 12A Introduction to Engineering Design I (1.5)  
 and  
 ETEC 12B Introduction to Engineering Design II (1.5)  
 ETEC 14 Electronics for Engineering Technologists (3)  
 or  
 ETEC 14A Electronics for Engineering Technologists I (1.5)  
 and  
 ETEC 14B Electronics for Engineering Technologists II (1.5)  
 ETEC 16 Computer Integrated Manufacturing (3)  
 or  
 ETEC 16A Computer Integrated Manufacturing I (1.5)  
 and  
 ETEC 16B Computer Integrated Manufacturing II (1.5)  
 CHEM 1A General Chemistry I (5)  
 MATH 190 Single Variable Calculus and Analytic Geometry I (5)  
 PHYS 2A General Physics (4)  
**3-7 units from:**  
 CIS 13 Computer Information Systems (3)  
 ECHT 110 Introduction to Direct and Alternating Current Circuits (3)  
 ENGR 1 Introduction to Engineering (2)  
 ENGR 9 Engineering Mechanics – Statics (3)  
 ETEC 15 Aerospace Engineering (3)  
 or  
 ETEC 15A Aerospace Engineering I (1.5)  
 and  
 ETEC 15B Aerospace Engineering II (1.5)  
 ETEC 18 Engineering Design and Development (3)  
 or  
 ETEC 18A Engineering Design and Development I (1.5)  
 and  
 ETEC 18B Engineering Design and Development II (1.5)  
 MTT 101 Introduction to Conventional and CNC Machining (4)  
 MTEC 70 Basic Robotics (2)  
 MTEC 75A Integrated Robotic and Automated Technologies I (1.5)  
 and  
 MTEC 75B Integrated Robotic and Automated Technologies II (1.5)  
**Total Units: 29-33**

For Gainful Employment program information, please visit [www.elcamino.edu/academics/indtech/engineeringtech](http://www.elcamino.edu/academics/indtech/engineeringtech)

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

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

**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, direct current circuits, capacitance, inductance, reactance, and impedance. Techniques in computer simulation and electrical measurements will be stressed.

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

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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 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 15****Aerospace Engineering**

3 units; 2 hours lecture, 4 hours lab

Credit, degree applicable

Transfer CSU

In this course, students are introduced to the various aspects of aerospace engineering. Through hands-on projects and problems, students will learn about aerodynamics, astronautics, space-life sciences and systems engineering.

**Engineering Technology 15A****Aerospace Engineering I**

1.5 units; 1 hour lecture, 2 hours lab

Credit, degree applicable

Transfer CSU

This is the first of two courses that introduces the various aspects of aerospace engineering. Through hands-on projects and problems, students will learn about aerodynamics and astronautics.

Note: The two-course sequence Engineering Technology 15A and 15B is the same as Engineering Technology 15.

**Engineering Technology 15B****Aerospace Engineering II**

1.5 units; 1 hour lecture, 2 hours lab

Recommended Preparation: Engineering Technology 15A

Credit, degree applicable

Transfer CSU

This is the second of two courses that introduces the various aspects of aerospace engineering. Through hands-on projects and problems, students will learn about astronautics, space-life sciences and systems engineering.

Note: The two-course sequence Engineering Technology 15A and 15B is the same as Engineering Technology 15.

**Engineering Technology 16****Computer Integrated Manufacturing**

3 units; 2 hours lecture, 4 hours lab

Credit, degree applicable

Transfer CSU

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

**Engineering Technology 16A****Computer Integrated Manufacturing I**

1.5 units; 1 hour lecture, 2 hours lab

Credit, degree applicable

Transfer CSU

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

Note: The two-course sequence Engineering Technology 16A and 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 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 or 12A and 12B; and 14 or 14A and 14B; and 16 or 16A and 16B 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; and 14 or 14A and 14B; and 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*

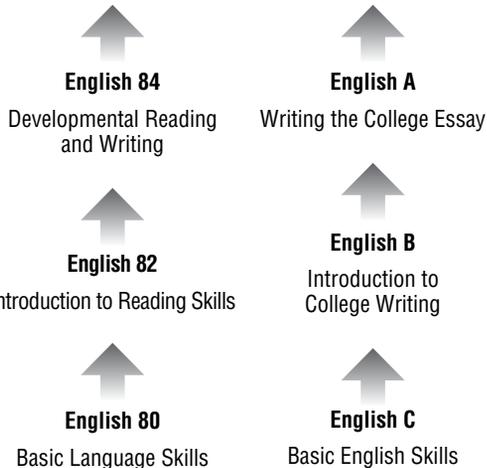
This is the second course in a two-course sequence that covers engineering design and development. In this capstone course, teams of students will work together to design and construct solutions to engineering problems. Emphasis will be placed on testing methods, project construction, project presentation,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

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

**English Course Sequence Leading to:**

# ENGLISH 1A

Reading and Composition



English RWA is a 5-unit course that combines the content of English 84 and English A. Please see a counselor for more information.

**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.

At least 50 percent of the courses required for the English major must be completed at El Camino College.

**Course Title****Required Core: 7 units**

ENGL 1A	Reading and Composition (4)
ENGL 1AH	Honors Reading and Composition (4)
ENGL1B	Literature and Composition (3)
ENGL 1BH	Honors Literature and Composition (3)
ENGL 1C	Critical Thinking and Composition (3)
ENGL 1CH	Honors Critical Thinking and Composition (3)

**a minimum of 6 units from Literature:**

ENGL 15A	Survey of British Literature I (3)
ENGL 15B	Survey of British Literature II (3)
ENGL 20	Shakespeare's Plays – Tragedies and Romances (3)
ENGL 21	Shakespeare's Plays – Comedies and Histories (3)
ENGL 35	World Literature: 3500 BCE to 1650 CE (3)
ENGL 36	World Literature: 1650 CE to Present (3)
ENGL 40A	American Literature I (3)
ENGL 40B	American Literature II (3)

**a minimum of 6 units from Electives:**

ENGL 1B*	Literature and Composition (3)
or	
ENGL 1BH*	Honors Literature and Composition (3)
ENGL 1C*	Critical Thinking and Composition (3)
or	
ENGL 1CH*	Honors Critical Thinking and Composition (3)
ENGL 12	Introduction to Fiction (3)
ENGL 15A*	Survey of British Literature I (3)
ENGL 15B*	Survey of British Literature II (3)
ENGL 20*	Shakespeare's Plays – Tragedies and Romances (3)
ENGL 21*	Shakespeare's Plays – Comedies and Histories (3)
ENGL 24A	Creative Writing: Introduction to Poetry (3)
ENGL 25A	Creative Writing: Introduction to the Craft of Fiction (3)
ENGL 27	Children's Literature (3)
ENGL 28	Images of Women in Literature (3)
ENGL 30	The English Bible as Literature (3)
ENGL 31	Mythology and Folklore (3)
ENGL 32	Creative Writing: A Workshop in Fiction (3)
ENGL 34	The Short Story (3)
ENGL 35*	World Literature: 3500 BCE to 1650 CE (3)
ENGL 36*	World Literature: 1650 CE to Present (3)
ENGL 39	Literature and Film (3)
ENGL 40A*	American Literature I (3)
ENGL 40B*	American Literature II (3)
ENGL 41B	Survey of Film: 1950 to the Present (3)
ENGL 42	Chicano and Latino Literature (3)
ENGL 43	African American Literature (3)
ENGL 44	The Literature of American Ethnic Groups (3)
ENGL 48	Modern Literature of Latin America (3)
ENGL 78	Creative Writing: Screenwriting (3)
ENGL 98	College Literary Magazine Editing and Publishing (3)

**Total Units: 19**

\*Note: if not used for required composition or literature

**Preparation for the English Transfer Major**

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

**ENGLISH****AA-T Degree****Humanities Division**

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

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

The Associate in Arts for Transfer (AA-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AA-T are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AA-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AA-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AA-T.

**Course Title****Required Core: 6 units**

ENGL1B	Literature and Composition (3)
ENGL 1BH	Honors Literature and Composition (3)
ENGL 1C	Critical Thinking and Composition (3)
ENGL 1CH	Honors Critical Thinking and Composition (3)

**List A: 6 units**

ENGL 15A	Survey of British Literature I (3)
ENGL 15B	Survey of British Literature II (3)
ENGL 35	World Literature: 3500 BCE to 1650 CE (3)
ENGL 36	World Literature: 1650 CE to Present (3)
ENGL 40A	American Literature I (3)
ENGL 40B	American Literature II (3)

**List B: 3 units****Any course from List A not already completed**

- ENGL 24A Creative Writing: Introduction to Poetry (3)
- ENGL 25A Creative Writing: Introduction to the Craft of Fiction (3)
- ENGL 31 Mythology and Folklore (3)
- ENGL 42 Chicano and Latino Literature (3)
- ENGL 43 African American Literature (3)
- ENGL 44 The Literature of American Ethnic Groups (3)

**List C: 3-4 units****Any course from List A or List B not already completed**

- CHIN 1 Elementary Chinese I (4)
- CHIN 2 Elementary Chinese II (4)
- CHIN 3 Intermediate Chinese I (4)
- ENGL 12 Introduction to Fiction (3)
- ENGL 20 Shakespeare's Plays – Tragedies and Romances (3)
- ENGL 21 Shakespeare's Plays – Comedies and Histories (3)
- ENGL 27 Children's Literature (3)
- ENGL 28 Images of Women in Literature (3)
- ENGL 30 The English Bible as Literature (3)
- ENGL 32 Creative Writing: A Workshop in Fiction (3)
- ENGL 34 The Short Story (3)
- ENGL 39 Literature and Film (3)
- ENGL 41B Survey of Film: 1950 to the Present (3)
- ENGL 48 Modern Literature of Latin America (3)
- ENGL 78 Creative Writing: Screenwriting (3)
- ENGL 98 College Literary Magazine Editing and Publishing (3)
- FREN 1 Elementary French I (4)
- FREN 2 Elementary French II (4)
- FREN 3 Intermediate French I (4)
- FREN 4 Intermediate French II (4)
- FREN 5 Advanced French I (3)
- FREN 6 Advanced French II (3)
- GERM 1 Elementary German I (4)
- GERM 2 Elementary German II (4)
- HUMA 1 An Introduction to the Humanities (3)
- ITAL 1 Elementary Italian I (4)
- ITAL 2 Elementary Italian II (4)
- JAPA 1 Elementary Japanese I (4)
- JAPA 2 Elementary Japanese II (4)
- JAPA 3 Intermediate Japanese I (4)
- JAPA 4 Intermediate Japanese II (4)
- JOUR 1 News Writing and Reporting (3)
- SPAN 1 Elementary Spanish I (4)
- SPAN 2 Elementary Spanish II (4)
- SPAN 3 Intermediate Spanish I (4)
- SPAN 4 Intermediate Spanish II (4)
- SPAN 5 Advanced Spanish I (3)
- SPAN 6 Advanced Spanish II (3)
- SPAN 52A Spanish for Native Speakers I (4)
- SPAN 52B Spanish for Native Speakers II (4)

**Total Units: 18-19****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, and study and test-taking techniques. Special emphasis will be placed on analysis of multi-paragraph 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 RWA****Integrated Reading and Writing**

5 units; 4 hours lecture, 2 hours lab

*Prerequisite: credit in English B and credit in English 82 or qualification by testing (English Placement Test) and assessment**Credit, degree applicable*

This course prepares students for transfer-level reading and writing tasks. The course integrates the reading and writing processes and includes weekly one-on-one focused tutorial support. Students practice analyzing and evaluating primarily non-fiction texts as the basis for composing well-developed expository essays. Students develop skills in reading comprehension, vocabulary, essay writing, sentence structure, research techniques, and source documentation.

*Note: Pass/no pass only.*

**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 a short essay based on personal experiences, observations, and reactions to short reading selections. Students learn basic rules of grammar, mechanics, and usage. Students practice a variety of sentence types and paragraph structures. Students revise their writing with the assistance of weekly one-on-one tutorials.

*Note: Pass/no pass only.*

**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 1A****Reading and Composition**

4 units; 4 hours lecture

*Prerequisite: credit in English A and credit in English 84; or English as a Second Language 53C with a minimum grade of C and English as a Second Language 52B with a minimum grade of C or qualification by testing (English or ESL 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 placed on the ability to write an essay in which each paragraph relates to a controlling idea, has an introduction and conclusion, and contains primary and secondary support. College-level reading material will be assigned to provide the stimulus for class discussion and writing assignments, including a required research paper.

*\*Note: The maximum UC credit allowed for students completing English 1A, Reading and Composition is one course.*

**English 1AH****Honors Reading and Composition**

4 units; 4 hours lecture

*Prerequisite: credit in English A and credit in English 84 or English as a Second Language 53C with a minimum grade of C and English as a Second Language 52B with a minimum grade of C or qualification by testing (English or ESL Placement Test) and assessment*

*Credit, degree applicable*

*Transfer CSU, UC*

This honors course, intended for students in the Honors Transfer Program, is designed to strengthen students ability to read with understanding and discernment, to discuss assigned readings intelligently, and to write clearly. Emphasis will be placed on the ability to write an essay in which each paragraph relates to a controlling idea, has an introduction and conclusion, and contains primary and secondary support. College-level reading material will be assigned to provide the stimulus for class discussion and writing assignments, including a required research paper. This course is enriched through extensive, rigorous reading, writing, and research assignments.

*Note: Students may take either English 1A or English 1AH. Duplicate credit will not be awarded for English 1A and English 1AH.*

**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 1BH****Honors Literature and Composition**

3 units; 3 hours lecture

*Prerequisite: English 1A or English 1AH with a minimum grade of C*

*Credit, degree applicable*

*Transfer CSU, UC*

This honors course, intended for students in the Honors Transfer Program, is designed to stimulate an enjoyment of literature and to develop interpretive, critical, and analytical reading skills. Students will also receive extensive instruction on writing critically about short stories, full-length works (such as novellas, novels, plays, or biographies), and poems. This course will include critical analysis and research involving one or more literary genres. This course is enriched through extensive, rigorous reading, writing, and research assignments.

*Note: Students may take either English 1B or English 1BH. Duplicate credit will not be awarded for English 1B and English 1BH.*

**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 1CH*****Honors Critical Thinking and Composition****3 units; 3 hours lecture**Prerequisite: English 1A or English 1AH with a minimum grade of C**Credit, degree applicable**Transfer CSU, UC*

This honors course, intended for students in the Honors Transfer Program, focuses on the development of critical thinking skills. Students will apply these skills to the analysis of written arguments in various forms and genres, both classic and contemporary, and to the writing of effective persuasive essays. In class and while doing research of electronic and print media, students will learn to evaluate and interpret data, to recognize assumptions, to distinguish facts from opinions, to identify and avoid logical fallacies, to employ deductive and inductive reasoning, and to effectively assert and support argumentative claims. This course is enriched through extensive, rigorous reading, writing, and research assignments.

*Note: Students may take either English 1C or English 1CH. Duplicate credit will not be awarded for English 1C and English 1CH.*

**English 12*****Introduction to Fiction****3 units; 3 hours lecture**Prerequisite: 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.

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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 15A*****Survey of British Literature I****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 II****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 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.

*Note: English 15A is not a prerequisite to English 15B*

**English 20*****Shakespeare's Plays – Tragedies and Romances****3 units; 3 hours lecture**Prerequisite: 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 analyses. 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**Prerequisite: 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 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 pass/no pass 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. Students will also learn about peer editing and the workshop model for revising stories.

*Note: Letter grade or pass/no pass option.***English 27*****Children's Literature****3 units; 3 hours lecture**Prerequisite: 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**Prerequisite: 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, fairy tales, and nonfiction prose. Students become familiar with female archetypes, women's roles, and women's themes as presented by both male and female writers, examining traditional and revisionist approaches.

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

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

**English 32**

(formerly English 32abc)

***Creative Writing: A Workshop in Fiction****3 units; 3 hours lecture**Prerequisite: English 25A with a minimum grade of C or Pass**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 pass/no pass option.***English 34*****The Short Story****3 units; 3 hours lecture**Prerequisite: 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**Prerequisite: 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**Prerequisite: eligibility for English 1A**Credit, degree applicable**Transfer CSU, UC*

This course examines masterpieces of world literature from the mid-17th through 21st centuries as both reflections and progenitors of their cultures and nations of origin. Students explore the universal concerns of humankind as exemplified through the themes, forms, and trends of the literary works.

**English 39***Literature and Film**3 units; 3 hours lecture**Prerequisite: 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 I**3 units; 3 hours lecture**Prerequisite: eligibility for English 1A**Credit, degree applicable**Transfer CSU, UC*

This course surveys American literature from its beginnings through the Civil War. Coverage, which recognizes the contribution of women and of ethnic and other minorities to the national literature, includes the narratives of native peoples, the literature of discovery and exploration, the literature of European settlement, the literature of Pre-Revolutionary America, the literature of an emerging nation, and the literature of pre-Civil War America.

**English 40B***American Literature II**3 units; 3 hours lecture**Prerequisite: 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 41B***Survey of Film: 1950 to the 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**Prerequisite: 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.

**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, Middle Eastern, and Near Eastern Americans, Jewish Americans, and Native Americans. Emphasis will be on contemporary literature.

**English 48***Modern Literature of Latin America**3 units; 3 hours lecture**Prerequisite: 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.

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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 50AR****Accelerated Reading: Skills to Analysis**

5 units; 4 hours lecture, 2 hours lab

Prerequisite: credit in English 80 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 learn to integrate specific reading strategies and practice summarizing and responding to texts.

Note: This course is the equivalent of English 82 and English 84. Students who receive credit for both English 50AR and English 50AW can count one course for degree credit.

Note: Pass/no pass only.

**English 50AW****Accelerated Writing: Paragraph to Essay**

5 units; 4 hours lecture, 2 hours lab

Prerequisite: credit in English C or qualification by testing (English Placement Test) and assessment

Credit, degree applicable

This course is designed to prepare students for college-level writing by developing and strengthening basic writing skills. Students will read and analyze a variety of texts and will practice writing coherent, well-developed expository essays. Students will revise and edit their writing using peer review and weekly one-on-one tutorials. Students will review grammar and sentence skills and be introduced to research techniques.

Note: This course is the equivalent of English B and English A. Students who receive credit for both English 50AW and English 50AR can count one course for degree credit.

Note: Pass/no pass only.

**English 50RWA****Integrated Reading and Writing**

5 units; 4 hours lecture, 2 hours lab

Prerequisite: credit in English B and credit in English 82 or qualification by testing (English Placement Test) and assessment

Credit, degree applicable

This course prepares students for transfer-level reading and writing tasks. The course integrates the reading and writing processes and includes weekly one-on-one focused tutorial support. Students practice analyzing and evaluating primarily non-fiction texts as the basis for composing well-developed expository essays. Students develop skills in reading comprehension, vocabulary, essay writing, sentences structure, research techniques, and source documentation.

Note: Pass/no pass only.

**English 78**

(formerly English 38ab)

**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 pass/no pass option.

**English 98**

(formerly 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 99**

(formerly 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\*

This course provides special advanced studies in a subject field of English not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned English education projects (54 hours per unit).

\*Note: Transfer limitations apply.

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; 12 hours lab per week to be arranged (216 maximum hours lab per semester)

Enrollment Limitation: referral by instructor or counselor based on assessed academic need

Non-credit

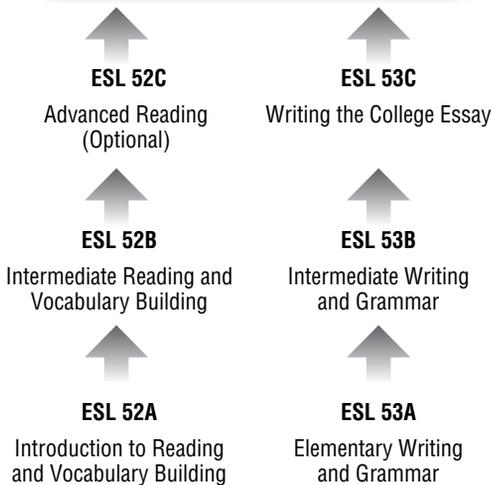
This course provides students with supervised tutorial instruction on writing text with clarity and reading text with literal and critical understanding; this may include prewriting and pre-reading techniques, organization of text, development of arguments, relationships between parts of text, integration of writing and reading for research and revision/editing for clarity and correctness.

Note: This course is repeatable and open for enrollment at registration and at any time during the semester.

## English as a Second Language

English Course Sequence Leading to:

### ENGLISH 1A Reading and Composition



### English as a Second Language 02A

#### Grammar and Conversation Level I

0 units; 5 hours lecture

*Recommended Preparation: concurrent enrollment in English as a Second Language 03A*

*Noncredit*

This Level I grammar and conversation course provides English practice through listening, speaking, reading and writing activities. Emphasis is on the verb “to be” in the present and past tenses and the simple present tense of action verbs. Other topics covered are nouns, adjectives and prepositions.

### English as a Second Language 02B

#### Grammar and Conversation Level II

0 units; 5 hours lecture

*Recommended Preparation: qualification by assessment or completion of English as a Second Language 02A and concurrent enrollment in English as a Second Language 03B*

*Noncredit*

This Level II conversation and grammar course provides practice in English through listening, speaking, reading, and writing activities. Emphasis is on prepositions of time, possessive nouns and adjectives, present progressive and simple past tense, helping verbs, imperatives, and punctuation rules.

### 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 and concurrent enrollment in English as a Second Language 03C*

*Noncredit*

This Level III conversation and grammar course provides extensive focused practice on English grammar forms and structures through listening, speaking, reading, and writing activities. Structures to be emphasized are past, present, and future verb tenses, and gerunds and infinitives.

### 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 and concurrent enrollment in English as a Second Language 03D*

*Noncredit*

This Level IV conversation and grammar course provides focused practice on English grammar forms and structures through listening, speaking, reading, and writing activities. Emphasis is on count and non-count nouns, including quantifiers; modals expressing advice, requests, desires, offers, and necessity; and the comparison forms of adjectives and adverbs.

## English as a Second Language Certificate of Accomplishment

Humanities Division

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

The English as a Second Language program prepares students for college-level English courses and employment in English-speaking environments. By completing the certificate requirements, the student will gain proficiency in reading, writing, speaking, and understanding American English. Competency will be assessed by the student successfully meeting all the outcomes in the courses required by the certificate.

### English as a Second Language Certificate of Accomplishment

Course	Title
ESL 51C	Advanced Listening, Speaking, and Pronunciation (4)
ESL 52C	Advanced Reading (4)
ESL 53C	Advanced Essay Writing and Grammar (4)

**Total Units: 12**

**English as a Second Language 03A***Reading/Writing Level I**0 units; 5 hours lecture**Recommended Preparation: concurrent enrollment in English as a Second Language 02A**Noncredit*

This beginning Level I reading and writing course is designed to develop basic reading skills, expand vocabulary, and develop basic writing skills. Students will move from sentence-level writing to short descriptive and chronologically-ordered paragraphs.

**English as a Second Language 03B***Reading/Writing Level II**0 units; 5 hours lecture**Recommended Preparation: qualification by assessment or completion of English as a Second Language 03A and concurrent enrollment in English as a Second Language 02B**Noncredit*

This Level II reading and writing course is designed to improve reading comprehension, increase vocabulary, and improve critical thinking and writing skills. Students will write descriptive, biographical, narrative, and subjective paragraphs.

**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 and concurrent enrollment in English as a Second Language 02C**Noncredit*

This intermediate reading and writing course is designed to improve reading comprehension, increase vocabulary, and improve critical thinking and writing skills. Students will write paragraphs using chronological order, emphatic order, and spatial order.

**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 and concurrent enrollment in English as a Second Language 02D**Noncredit*

This advanced reading and writing course is designed to provide students with strategies to improve reading comprehension and writing skills. Reading practice activities will be presented to increase vocabulary, to use context for determining meaning of texts, and to develop critical thinking skills. In writing, students will study a variety of grammatical structures and transitional expressions to help generate simple expository paragraphs.

**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 increase a student's English-speaking and comprehension skills in a supportive atmosphere. The course includes cross-cultural communication topics; role play and other small group activities; introduction to common American idioms and expressions; pronunciation exercises designed to improve intelligibility; and listening comprehension practice.

**English as a Second Language 51B***Intermediate Listening, Speaking and Pronunciation**4 units; 5 hours lecture**Prerequisite: English as a Second Language 51A with a minimum grade of C or qualification by assessment**Credit, degree applicable*

Students in this course gain greater confidence and skill in listening to and speaking English by participating in activities such as listening to mini-lectures and taking notes, presenting impromptu speeches, prepared speeches, and oral reports; conducting surveys and interviews; role playing; and discussing and debating controversial topics. Students improve their pronunciation, intonation and stress, listening comprehension, and knowledge of idiomatic expressions and American culture and humor.

**English as a Second Language 51C***Advanced Listening, Speaking and Pronunciation**4 units; 5 hours lecture**Prerequisite: English as a Second Language 51B with a minimum grade of C or qualification by assessment**Credit, degree applicable*

This course provides instruction in listening and speaking, emphasizing oral communication, pronunciation, and idiomatic expressions in a multi-cultural academic setting. Students practice listening to and taking notes on lectures from across the curriculum such as history, business, and science, and other listening material. Students present research-based speeches and participate in group discussions and panel presentations.

**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 is an introductory course designed to transfer literacy in the first language to English by building basic reading skills and expanding vocabulary. Through the use of reading texts, reading kits, main idea exercises, and skimming and scanning activities, the foundation skills are developed through regular application. The aim of the course is to identify and reinforce good reading habits and to free students from over-dependence on dictionaries, with a focus on context as the key to meaning.

**English as a Second Language 52B***Intermediate Reading and Vocabulary Building*

4 units; 5 hours lecture

*Prerequisite: English as a Second Language 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: English as a Second Language 52B with a minimum grade of C or qualification by assessment  
Credit, degree applicable*

This advanced-level reading course teaches interpretive, critical, and analytical reading skills for closer reading and better understanding of fiction and nonfiction works. It includes an in-depth study of a novel, and the terminology necessary to discuss and write critically about works of various genres.

**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.

**English as a Second Language 53B***Intermediate Writing and Grammar*

4 units; 5 hours lecture

*Prerequisite: English as a Second Language 53A with a minimum grade of C or qualification by assessment  
Credit, degree applicable  
Transfer CSU, UC\**

This course offers students intensive experience in preparing to write college-level essays. Students will learn to write well-organized, coherent expository essays, including critical reactions to reading. They will review basic rhetorical modes such as summary, narration, description and process, and will be introduced to the rhetorical modes of comparison-contrast and argumentation. Simple, progressive and present perfect verbs, and other basic grammar rules will be reviewed, and passive voice, conditionals, past perfect, perfect modals, and other intermediate grammar topics will be introduced.

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

**English as a Second Language 53C***Advanced Essay Writing and Grammar*

4 units; 5 hours lecture

*Prerequisite: English as a Second Language 53B with a minimum grade of C or qualification by assessment  
Recommended Preparation:*

*English as a Second Language 52B*

*Credit, degree applicable*

*Transfer CSU, UC\**

This course strengthens college-level writing skills in preparation for English 1A for students learning English as a second language. Students read articles, essays, poetry, and works of fiction or non-fiction. They write well-developed essays in response to their reading. Students review basic grammar and develop advanced grammar and sentence skills. Students are introduced to and use Modern Language Association (MLA) style and research skills to write a short research-based essay.

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



## ENVIRONMENTAL HORTICULTURE

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

*Natural Sciences Division*

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

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

At least 50 percent of the requirements for the major must be completed at El Camino College.

Course	Title
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**Required Core: 21 units**

HORT 41	General Horticulture (3)
HORT 42	Plant Propagation (3)
HORT 46	Pest Control (3)
HORT 53	Soils and Fertilizers (3)
HORT 54	Landscape Design (3)
HORT 55	Plant Identification – Trees (3)
HORT 56	Plant Identification – Shrubs, Vines, and Groundcovers (3)

**one course from:**

BIOL 15	Environmental Aspects of Biology (3)
BIOL 16	Field Entomology (4)
HORT 44	Ecology of Edible, Medicinal and Poisonous Plants (3)
HORT 60	Basic Landscape Irrigation (3)
HORT 95abcd	Cooperative Work Experience Education (2-4)

**Total Units: 23-25**

### Certificate of Achievement

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the requirements for the certificate must be completed at El Camino College.

### Environmental Horticulture Certificate of Achievement

Course	Title
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**Required Core: 21 units**

HORT 41	General Horticulture (3)
HORT 42	Plant Propagation (3)
HORT 46	Pest Control (3)
HORT 53	Soils and Fertilizers (3)
HORT 54	Landscape Design (3)
HORT 55	Plant Identification – Trees (3)
HORT 56	Plant Identification – Shrubs, Vines, and Groundcovers (3)

**one course from:**

BIOL 8	Biology of Plants (4)
BIOL 15	Environmental Aspects of Biology (3)
BIOL 16	Field Entomology (4)
HORT 44	Ecology of Edible, Medicinal and Poisonous Plants (3)
HORT 60	Basic Landscape Irrigation (3)
HORT 95abcd	Cooperative Work Experience Education (2-4)

**Total Units: 23-25**

For Gainful Employment program information, please visit [www.elcamino.edu/academics/naturalsciences/Horticulture](http://www.elcamino.edu/academics/naturalsciences/Horticulture)

## ENVIRONMENTAL TECHNOLOGY

### Certificate of Accomplishment

*Industry and Technology Division*

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

The environmental technology program prepares students for employment in the sustainable technology field. Students gain understanding of the broad range of ecological and social issues driving sustainability, as well as a global awareness of environmentalism. With a foundation in the principles of sustainability, students develop a framework of understanding with specific training in environmental systems, sustainable materials, and technical methodologies. Areas such as distribution and energy management, water resources, and waste management will be studied. Students completing the program will be positioned for sustainable jobs in architecture, construction and building energy auditing, heating, ventilation and air conditioning, fashion, automotive technology, and related industries. Competencies will be assessed regularly by student performance in the classroom and laboratory.

### Certificate of Accomplishment

A Certificate of Accomplishment will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

### Environmental Technology Certificate of Accomplishment

#### Course Title

#### Required Core: 9 units

ET 101	Theory and Relevancy of Global Environmental Awareness (3)
ET 102	Sustainable Energy and Renewable Building Sciences and Technologies (3)
ET 103	Environmental Technology Materials and Methodologies (3)

#### 4-8 units from:

ACR 20	Solar Energy Applications – Photovoltaics and Solar Thermal (3)
ACR 25	Energy Efficient Residential, Commercial and Industrial Air Conditioning (4)
ARCH 100	An Orientation to Architecture (1)
ET 165	Sustainable and Regenerative Practices in Site and Landscape Development (3)
CTEC 100	Building Fundamentals (4)
CTEC 110	Additions and Remodeling (4)
FASH 20	Textiles (3)

**Total Units: 13-17**

## Environmental Technology

### Environmental Technology 95

(formerly 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\**

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Environmental Technology field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

*\*Note: Transfer limitations apply.*

*Note: The total units earned for Cooperative Work Experience Education may not exceed 16 units.*

### Environmental Technology 99

(formerly 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\**

This course provides special advanced studies in a subject field of Environmental Technology not covered in the regular departmental listings. Regular conferences with the instructor are coordinated with assigned Environmental Technology projects (54 hours per unit).

*\*Note: Transfer limitations apply.*

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

### Environmental Technology 101

#### Theory and Relevancy of Global Environmental Awareness

3 units; 3 hours lecture

*Recommended Preparation: eligibility for English 1A*

*Credit, degree applicable*

*Transfer CSU*

This introductory course explores topics of sustainability. The topics range from a historical framework of environmentalism to urban ecology, the theories of regenerative landscape, landscape urbanism and deconstructivism in a post-industrial economy. Class discussion will include the role of commerce and governmental regulation and how it affects the emerging green economy. Additional topics include a 21st century view of how we interpret opportunities for revitalization and renovation of our urban spaces.

**Environmental Technology 102**

(formerly Environmental Technology 1)

***Sustainable Energy and Renewable Building Sciences and Technologies***

3 units; 3 hours lecture

*Recommended Preparation: Environmental Technology 101 and eligibility for English 1A**Credit, degree applicable**Transfer CSU*

This course is designed to prepare students to survey and evaluate systems of sustainable and conventional energy creation, energy distribution, energy management, and introduces the developing rating systems that are quantifying and measuring green building and environmental system efficiency performance. "Green Regenerative" sciences and technologies will be emphasized. Areas of concentration will include: green building design and site selection, energy efficient designs and construction techniques, photovoltaic (PV) systems, solar thermal systems, wind energy, fuel cells, solid waste management, water conservation, and building energy rating systems.

**Environmental Technology 103*****Environmental Technology Materials and Methodologies***

3 units; 2 hours lecture, 4 hours lab

*Recommended Preparation: Environmental Technology 102 and eligibility for English 1A**Credit, degree applicable**Transfer CSU*

This course is the third in a series of courses that reviews the principles of sustainability and fosters an understanding of environmental awareness. This course introduces green alternative methodologies and the processes of using ecological and green products into everyday life. The principles of 'cradle to cradle' and regenerative processes will be examined and applied, in how we allocate, recycle and re-use our resources.

**Environmental Technology 165*****Sustainable and Regenerative Practices in Site and Landscape Development***

3 units; 2 hours lecture, 4 hours lab

*Recommended Preparation: eligibility for Architecture 150A and English 1A**Credit, degree applicable**Transfer CSU*

This course explores sustainable and regenerative principles for site and landscape development. The course covers strategies for hillside development, grading and drainage including retention systems and Standard Urban Storm Water Mitigation Plan (SUSMP) methodologies. Other topics included are paving design including permeable paving, wall systems, water and energy efficient irrigation and lighting systems, as well as, drought tolerant landscape planting strategies.

**ESCROW****See Real Estate****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.

**African American Studies Option:****Course Title*****Required Core: 18 units***

ENGL 43	African American Literature (3)
ESTU 1	Introduction to Ethnic Studies (3)
HIST 110	The African American in the United States to 1877 (3)
HIST 111	The African American in the United States from 1877 to the Present (3)
HIST 183	Introduction to African History, Prehistory to 1885 (3)
PSYC 10	African American Psychology (3)
<b><i>3 units from:</i></b>	
ART 209	History of African Art (3)
ENGL 44	The Literature of American Ethnic Groups (3)
HIST 122	United States Social History: Cultural Pluralism in America (3)
HIST 184	Introduction to African History, 1885 to the Present (3)
MUSI 113	Survey of Jazz (3)
POLI 5	Ethnicity in the American Political Process (3)
SOCI 104	Social Problems (3)
SOCI 107	Issues of Race and Ethnicity in the United States (3)

**Total Units: 21**

**American Cultures Option:**

Course	Title
<b>Required Core: 3 units</b>	
ESTU 1	Introduction to Ethnic Studies (3)
<b>15 units from:</b>	
ANTH 6	Native Peoples of North America (3)
ART 207	Art History of Mexico and Central and South America (3)
ENGL 42	Chicano and Latino Literature (3)
ENGL 43	African American Literature (3)
ENGL 44	The Literature of American Ethnic Groups (3)
ESTU 3	The Chicano in Contemporary United States Society (3)
ESTU 5	Chicano Culture (3)
HIST 108	United States History: The American Indian Experience (3)
HIST 110	The African American in the United States to 1877 (3)
HIST 111	The African American in the United States from 1877 to the Present (3)
HIST 112	History of the Chicano in the United States (3)
HIST 122	United States Social History: Cultural Pluralism in America (3)
PSYC 10	African American Psychology (3)
SOCI 107	Issues of Race and Ethnicity in the United States (3)
<b>3 units from:</b>	
ANTH 2	Introduction to Cultural Anthropology (3)
HIST 154	A History of Mexico (3)
HIST 175	History of Asian Civilizations to 1600 (3)
HIST 176	History of Asian Civilizations from 1600 to the Present (3)
HIST 183	Introduction to African History, Prehistory to 1885 (3)
HIST 184	Introduction to African History, 1885 to the Present (3)
MUSI 113	Survey of Jazz (3)
POLI 5	Ethnicity in the American Political Process (3)
SOCI 104	Social Problems (3)
<b>Total Units: 21</b>	

**Asian American Studies Option:**

Course	Title
<b>Required Core: 15 units</b>	
ENGL 44	The Literature of American Ethnic Groups (3)
ESTU 1	Introduction to Ethnic Studies (3)
HIST 175	History of Asian Civilizations to 1600 (3)
HIST 176	History of Asian Civilizations from 1600 to the Present (3)
SOCI 107	Issues of Race and Ethnicity in the United States (3)
<b>3 units from:</b>	
ART 106	Cross-Cultural Art (3)
ART 205A	History of Asian Art – India and Southeast Asia (3)
ART 205B	History of Asian Art – China, Korea and Japan (3)
JAPA 25	Cultural Aspects of the Japanese Language (3)
PHIL 115	Existentialism (3)
POLI 5	Ethnicity in the American Political Process (3)
SOCI 104	Social Problems (3)
<b>Total Units: 18</b>	

**Chicano Studies Option:**

Course	Title
<b>Required Core: 18 units</b>	
ART 207	Art History of Mexico and Central and South America (3)
ENGL 42	Chicano and Latino Literature (3)
ESTU 3	The Chicano in Contemporary United States Society (3)
ESTU 5	Chicano Culture (3)
HIST 112	History of the Chicano in the United States (3)
HIST 154	A History of Mexico (3)
<b>3 units from:</b>	
ENGL 44	The Literature of American Ethnic Groups (3)
ESTU 1	Introduction to Ethnic Studies (3)
HIST 122	United States Social History: Cultural Pluralism in America (3)
POLI 5	Ethnicity in the American Political Process (3)
SOCI 104	Social Problems (3)
SOCI 107	Issues of Race and Ethnicity in the United States (3)
<b>Total Units: 21</b>	

**Native American Studies Option:**

Course	Title
<b>Required Core: 18 units</b>	
ANTH 6	Native Peoples of North America (3)
ENGL 44	The Literature of American Ethnic Groups (3)
ESTU 1	Introduction to Ethnic Studies (3)
HIST 108	United States History: The American Indian Experience (3)
POLI 5	Ethnicity in the American Political Process (3)
SOCI 107	Issues of Race and Ethnicity in the United States (3)
<b>3 units from:</b>	
ANTH 2	Introduction to Cultural Anthropology (3)
ANTH 7	Native Peoples of South America (3)
ANTH 8	Ancient Civilizations of Mesoamerica (3)
ART 207	Art History of Mexico and Central and South America (3)
SOCI 104	Social Problems (3)
<b>Total Units: 21</b>	



**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.

**Ethnic Studies 5**

*Chicano Culture*

3 units; 3 hours lecture

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

*Transfer CSU*

This course is an interdisciplinary study of Chicano culture in the United States. Emphasis is placed on the historical roots and development of the cultural contributions of Chicanos to American society in the arts, literature, language, music and other expressions of contemporary popular culture. Analysis of the central components of Chicano cultural values, norms and customs will also be assessed.

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

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## FASHION

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

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

The fashion program prepares students for employment in the field of design and production or merchandising and provides upgrade opportunities for currently employed personnel. Upon completing the degree or certificate requirements, students gain proficiency in clothing, construction, fashion illustration, patternmaking, draping, computer aided fashion design, and manufacturing. Students completing the requirements for the merchandising option will also gain proficiency in presentation techniques, planning, promotion, fashion coordination, advertising, and sales. Competencies will be assessed by portfolios and exhibitions of original apparel design and garments. Students may expect to enter industry as a design assistant, costume technician, fashion consultant, stylist, entry-level pattern maker, quality control assistant, assistant merchandiser, or sales associate.

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

#### Fashion Design and Production Option:

Course	Title
FASH 1	Career Opportunities in Fashion (1)
FASH 4	Computer Fashion Illustration (3)
FASH 10	Clothing Construction I (3)
FASH 14	Apparel Production Techniques (1)
FASH 15	Beginning Fashion Illustration (2)
FASH 16	Intermediate Contemporary and Historical Fashion Illustration (2)
FASH 18	Advanced Fashion Illustration Portfolio Techniques (2)
FASH 20	Textiles (3)
FASH 26A	Basic Design and Patternmaking (3)
FASH 26B	Basic Dress Design through Draping Process (3)
FASH 29	Computer Pattern Design/Patternmaking (3)
FASH 31	History of Costume (3)
FASH 41	Fashion Analysis and Selection (3)
FASH 95	Cooperative Work Experience Education (2)

**Total Units: 34**

#### Recommended Electives:

FASH 11	Clothing Construction II (3)
FASH 35	Applied Color Theory (2)

#### Fashion Merchandising Option:

Course	Title
BUS 22	Human Relations in Organizations (3)
FASH 1	Career Opportunities in Fashion (1)
FASH 2	Presentation Techniques for Fashion (1)
FASH 4	Computer Fashion Illustration (3)
FASH 10	Clothing Construction I (3)
FASH 15	Beginning Fashion Illustration (2)
FASH 20	Textiles (3)
FASH 27	Fashion Merchandising (3)
FASH 28	Visual Merchandising (2)
FASH 35	Applied Color Theory (2)
FASH 41	Fashion Analysis and Selection (3)
FASH 44	Fashion Show Production and Promotions (3)
FASH 95	Cooperative Work Experience Education (2)

**Total Units: 31**

#### **Certificates of Achievement**

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

#### **Fashion Design and Production Certificate of Achievement**

Course	Title
<i>Required Core: 25 units</i>	
FASH 1	Career Opportunities in Fashion (1)
FASH 2	Presentation Techniques for Fashion (1)
FASH 4	Computer Fashion Illustration (3)
FASH 10	Clothing Construction I (3)
FASH 14	Apparel Production Techniques (1)
FASH 15	Beginning Fashion Illustration (2)
FASH 20	Textiles (3)
FASH 26A	Basic Design and Patternmaking (3)
FASH 26B	Basic Dress Design through Draping Process (3)
FASH 41	Fashion Analysis and Selection (3)
FASH 95	Cooperative Work Experience Education (2)

#### *4-6 units from:*

FASH 11	Clothing Construction II (3)
FASH 16	Intermediate Contemporary and Historical Fashion Illustration (2)
FASH 18	Advanced Fashion Illustration Portfolio Techniques (2)
FASH 23	Fitting and Alterations (2)
FASH 29	Computer Pattern Design/Patternmaking (3)
FASH 31	History of Costume (3)
FASH 35	Applied Color Theory (2)
FASH 44	Fashion Show Production and Promotions (3)

**Total Units: 29-31**

**Fashion Merchandising Certificate of Achievement****Course Title****Required Core: 29 units**

BUS 15	Business Mathematics (3)
FASH 1	Career Opportunities in Fashion (1)
FASH 2	Presentation Techniques for Fashion (1)
FASH 4	Computer Fashion Illustration (3)
FASH 10	Clothing Construction I (3)
FASH 15	Beginning Fashion Illustration (2)
FASH 20	Textiles (3)
FASH 27	Fashion Merchandising (3)
FASH 28	Visual Merchandising (2)
FASH 41	Fashion Analysis and Selection (3)
FASH 44	Fashion Show Production and Promotions (3)
FASH 95	Cooperative Work Experience Education (2)

**5-6 units from:**

BUS 12	Advertising (3)
BUS 14	Marketing (3)
BUS 21	Human Resources Management (3)
BUS 22	Human Relations in Organizations (3)
BUS 27	Effective English for Business (3)
FASH 35	Applied Color Theory (2)

**Total Units: 34-35****Fashion Stylist Certificate of Achievement****Course Title**

FASH 2	Presentation Techniques for Fashion (1)
FASH 10	Clothing Construction I (3)
FASH 15	Beginning Fashion Illustration (2)
FASH 23	Fitting and Alterations (2)
FASH 31	History of Costume (3)
FASH 41	Fashion Analysis and Selection (3)
FASH 44	Fashion Show Production and Promotions (3)
FASH 95	Cooperative Work Experience Education (2)

**Total Units: 19**

For Gainful Employment program information, please visit [www.elcamino.edu/academics/indtech/fashion](http://www.elcamino.edu/academics/indtech/fashion)

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

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**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: Art 110 with a minimum grade of C or equivalent**Recommended Preparation: Fashion 15 and Fashion 16**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 4**

(formerly Fashion 4ab)

**Computer Fashion Illustration***3 units; 2 hours lecture, 4 hours lab**Recommended Preparation: Fashion 15 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 10**

(formerly 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 machines. Students will construct several garments. Consumer decision-making is emphasized.

**Fashion 11**

(formerly Fashion 11ab)

***Clothing Construction II****3 units; 2 hours lecture, 3 hours lab**Prerequisite: Fashion 10 with a minimum grade of C or equivalent**Credit, degree applicable**Transfer CSU*

This course offers a study and development of contemporary garment construction using advanced techniques and procedures. Projects include garments made of a currently fashionable but "difficult to handle" fabric. Emphasis is placed on experimentation of the appropriate application of various techniques and procedures in constructing garments with workmanship.

**Fashion 14*****Apparel Production Techniques****1 unit; 0.5 hours lecture, 1.5 hours lab**Prerequisite: Fashion 4, 10, 15, and 26A**Recommended Preparation: Fashion 1 and Fashion 20; Mathematics 40**Credit, degree applicable**Transfer CSU*

This course is designed to acquaint the student with the activities and documentation necessary to mass-produce a garment or accessory item. In a semi-simulated design room environment, students design, produce, and advertise a product. Grading, documents, tech packs, production, and promotion principles are emphasized.

**Fashion 15**

(formerly Fashion 15ab)

***Beginning Fashion Illustration****2 units; 1 hour lecture, 3 hours lab**Recommended Preparation: Art 217**Credit, degree applicable**Transfer CSU*

This course explores beginning creative sketching and illustration techniques for fashion design and merchandising students. Instruction includes the development of the fashion figure, quick sketches, and technically detailed flat apparel sketches. Students will creatively illustrate fashion design concepts for men, women, and children in relation to correct proportion and scale. Various art supplies will be utilized to create cohesive group presentations targeted at various segments of the apparel industry.

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

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**Fashion 16**

(formerly Fashion 16ab)

***Intermediate Contemporary and Historical Fashion Illustration****2 units; 1 hour lecture, 3 hours lab**Prerequisite: Fashion 15 with a minimum grade of C or equivalent**Recommended Preparation: Art 217**Credit, degree applicable**Transfer CSU*

This course focuses on contemporary and historic Illustration. Students delve into the study of historical fashion design, how it is properly illustrated, and its application for contemporary apparel design. Historic time periods include the Egyptian, Greek, Roman, Middle Ages, Renaissance, 17th and 18th Centuries, Empire, Romantic, Caroline and Edwardian Period to 1980's. Attention is given to fabric, color, and texture renderings in various mediums.

**Fashion 18*****Advanced Fashion Illustration Portfolio Techniques****2 units; 1 hour lecture, 3 hours lab**Prerequisite: Fashion 16 with a minimum grade of C or equivalent**Recommended Preparation: Art 217**Credit, degree applicable**Transfer CSU*

This advanced fashion illustration and costume design course prepares students to develop a professional portfolio for presentation to employers and to qualify for university transfer. Through lecture and lab, advanced research, rendering, and media techniques, fashion design and merchandising skills are emphasized for perfecting portfolio presentations.

**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: Fashion 10 with a minimum grade of C or equivalent**Credit, degree applicable**Transfer CSU*

This course teaches alterations and repair of Ready-to-Wear (RTW) clothing and alterations of commercial patterns to conform to body contours. Students analyze the figure and adjust patterns and garments for figure variations. Material covered will be valuable to apparel industry patternmakers and home sewers.

**Fashion 26A****Basic Design and Patternmaking**

3 units; 2 hours lecture, 3 hours lab

Prerequisite: Fashion 10 with a minimum grade of C

Recommended Preparation: Mathematics 40

Credit, degree applicable

Transfer CSU

This course covers manual 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: Fashion 10 with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

This course is the study of draping techniques to create original garment designs. The draping process is the development of a garment through fabric manipulation directly on a dress form. To maintain design integrity, this course emphasizes the relationship of the fabric hand, color print and structure so students will be able to solve unfamiliar design problems.

**Fashion 27****Fashion Merchandising**

3 units; 3 hours lecture

Recommended Preparation: English A

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: English A

Credit, degree applicable

Transfer CSU

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

**Fashion 29**

(formerly Fashion 29ab)

**Computer Pattern Design/Patternmaking**

3 units; 2 hour lecture, 3 hours lab

Prerequisite: Fashion 26A with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

This course covers the application of computer pattern aided design 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 pass/no pass 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, their effects and relationships to the political, social and economic conditions of the times and how they have influenced life style and culture. Emphasis is placed on both aesthetic and functional aspects of costumes and 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: 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 phenomena, 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 41****Fashion Analysis and Selection**

3 units; 3 hours lecture

Recommended Preparation: English A

Credit, degree applicable

Transfer CSU

In this course, students are introduced to the societal importance of apparel and personal appearance. Emphasis is placed on social, psychological, cultural and physical clothing needs. Additional topics include elements and principles of design, wardrobe planning, apparel quality and clothing care, fit, and apparel purchasing.

**Fashion 44**

(formerly Fashion 42abc)

***Fashion Show Production and Promotions****3 units; 2 hours lecture, 3 hours lab per week to be arranged**Prerequisite: Fashion 10 and Fashion 41 with a minimum grade of C in prerequisite**Credit, degree applicable**Transfer CSU*

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

**Fashion 95**

(formerly 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\**

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Fashion field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

*\*Note: Transfer limitations apply.**Note: The total units earned for Cooperative Work Experience Education may not exceed 16 units.***Fashion 99**

(formerly 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\**

This course provides special advanced studies in a subject field of Fashion not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Fashion projects (54 hours per unit).

*\*Note: Transfer limitations apply.**Note: For eligibility requirements, go to**www.elcamino.edu/admissions/credit.asp***FILM/VIDEO****A.A. Degree and Certificate of Achievement***Fine Arts Division**www.elcamino.edu/academics/finearts*

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

**Course Title*****Required Core: 12 units***

FILM 110 Film Analysis and Appreciation (3)

FILM 113 Screenplay Analysis (3)

FILM 120 Introduction to Film/Video Production (3)

FILM 122 Production I (3)

***11-12 units from:***

ENGL 78 Creative Writing: Screenwriting (3)

FILM 114 Story Development (3)

FILM 121 Audio Production (3)

FILM 124 Production Planning (3)

FILM 128 Television Production (3)

FILM 153 American Independent Cinema (3)

FILM 154 Regional Cinemas (3)

FILM 232 Production II (3)

FILM 234 Camera and Lighting (3)

FILM 236 Editing (3)

FILM 95 Cooperative Work Experience Education (2-4)

PHOT 101 Elementary Photography (2)

**Total Units: 23-24**

**Certificate of Achievement**

A Certificate of Achievement will be granted upon completion of all program requirements. A minimum of 12 units must be completed at El Camino College.

**Film/Video Production Certificate of Achievement****Course Title****Required Core: 15 units**

FILM 110	Film Analysis and Appreciation (3)
FILM 120	Introduction to Film/Video Production (3)
FILM 122	Production I (3)
FILM 124	Production Planning (3)
FILM 128	Television Production (3)

**6 units from:**

FILM 121	Audio Production (3)
FILM 232	Production II (3)
FILM 234	Camera and Lighting (3)
FILM 236	Editing (3)

**Total Units: 21**

For Gainful Employment program information, please visit [www.elcamino.edu/academics/finearts/filmvideo](http://www.elcamino.edu/academics/finearts/filmvideo)

**Film/Video 95**

(formerly 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\**

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Film/Video field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

*\*Note: Transfer limitations apply.**Note: The total units earned for Cooperative Work Experience Education may not exceed 16 units.***Film/Video 99**

(formerly 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 acknowledgment by the instructor with whom the student will work*

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

This course provides special advanced studies in a subject field of Film/Video not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Film/Video projects (54 hours per unit).

*\*Note: Transfer limitations apply.**Note: For eligibility requirements, go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)***Film/Video 100****Introduction to Electronic Media***3 units; 3 hours lecture**Credit, degree applicable**Transfer CSU*

This course surveys the history, structure, function, economics, content and evolution of radio, television, film, the Internet, and news media, including traditional and mature formats. The social, political, regulatory, ethical and occupational impact of the electronic media are also studied.

**Film/Video 105****Media Aesthetics***3 units; 3 hours lecture**Recommended Preparation: English B**Credit, degree applicable**Transfer CSU*

This course introduces students to close analyses of film and television texts and includes broad questions of form and content, aesthetics and meaning, and history and culture. Students explore the diverse possibilities presented by the cinematic art form through an examination of a wide variety of productions, national cinemas, and film movements. Topics include modes of production, narrative and non-narrative forms, visual design, editing, sound, genre, ideology and critical analysis.

**Film/Video 109****Introduction to Media Writing***3 units; 3 hours lecture**Recommended Preparation: eligibility for English 1A**Credit, degree applicable**Transfer CSU*

This course introduces students to writing for film and electronic media. Emphasis will be placed on preparing scripts in proper formats, including fundamental technical, conceptual and stylistic issues related to writing fiction and non-fiction scripts for informational and entertainment purposes in film and electronic media.

**Film/Video 110**

(formerly 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 113**

(formerly 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 114**

(formerly 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 120**

(formerly 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 121**

(formerly 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 122**

(formerly Film/Video 22)

**Production I***3 units; 2 hours lecture, 3 hours lab**Prerequisite: Film/Video 120 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 124**

(formerly 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 128**

(formerly Film/Video 28)

**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 153**

(formerly Film/Video 53)

**American Independent Cinema**

3 units; 3 hours lecture

Recommended Preparation: Film/Video 110

Credit, degree applicable

Transfer CSU, UC

This course surveys the socio-economic, political, and artistic forces that led to the rise of American Independent Cinema. Emphasis will be placed on studying film makers, such as D.W. Griffith, Roger Corman, Robert Redford, David Lynch, Spike Lee, and Quentin Tarantino, who pioneered producing movies outside of the traditional Hollywood system.

**Film/Video 154**

(formerly Film/Video 54)

**Regional Cinemas**

3 units; 3 hours lecture

Recommended Preparation: eligibility for English 1A

Credit, degree applicable

Transfer CSU, UC

This course will survey major films and filmmakers from one or more regions, such as Italy or India, or from a geographic area such as Africa or Latin America. By analyzing representative films as unique cultural products, the student will be introduced to various methods of interpreting and evaluating a particular region's indigenous cinema within its socio-political context. Emphasis is placed on studying films and directors whose stylistic and thematic trends have been affected by significant cultural events. As the content changes each semester, this course is repeatable for credit.

**Film/Video 232**

(formerly Film/Video 32)

**Production II**

3 units; 2 hours lecture, 3 hours lab

Prerequisite: Film/Video 122 or 128 with a minimum grade of C in prerequisite or equivalent

Credit, degree applicable

Transfer CSU, UC

This course provides the intermediate-level production student with practical, hands-on experience in film/video production, including planning, writing, shooting, and editing. Students will write and produce a variety of individual and group film/video projects.

**Film/Video 234**

(formerly Film/Video 34)

**Camera and Lighting**

3 units; 2 hours lecture, 3 hours lab

Prerequisite: Film/Video 120 or 122 with a minimum grade of C

Credit, degree applicable

Transfer CSU

This is an intermediate-level course in traditional and electronic cinematography that explores lighting design, composition, visual interpretation, and camera operation.

Note: Letter grade or pass/no pass option.

**Film/Video 236**

(formerly Film/Video 36)

**Editing**

3 units; 2 hours lecture, 3 hours lab

Credit, degree applicable

Transfer CSU

This is an intermediate-level course that teaches picture and sound editing skills. Advanced editing concepts such as pace, rhythm, and tempo will be explored through screenings, lectures, and student-made projects. Special attention will be paid to the role of digital technologies in film/video postproduction.

Note: Letter grade or pass/no pass option.



## 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.*

#### Fire and Emergency Technology Option:

Course	Title
FTEC 1	Fire Protection Organization (3)
FTEC 2	Fire Prevention Technology (3)
FTEC 3	Fundamentals of Personal Fire Safety and Survival (3)
FTEC 5	Fire Behavior and Combustion (3)
FTEC 6	Building Construction for Fire Protection (3)
FTEC 10	Hazardous Materials (3)
FTEC 20	Fire Protection Equipment and Systems (3)
FTEC 144	Emergency Medical Technician (6)

**Total Units: 27**

#### Recommended Electives:

FTEC 4	Fire Company Organization and Management (3)
FTEC 9	Fire Apparatus and Equipment (3)
FTEC 11	Arson Detection and Control (3)
PE 280	Exercise and Nutrition Programs for Fitness and Weight Management (3)

#### 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 and Emergency Technology 15 or equivalent;
4. Pass a medical examination according to the National Fire Protection Association (NFPA) Standard #1582;
5. Furnish proof of rubella immunity, Tuberculosis (TB) test and Hepatitis B vaccine.

In addition to the program prerequisites, it is recommended that students be eligible, through assessment or coursework, for English 1A and Mathematics 80.

Required Courses (after meeting above requirements):

Course	Title
FTEC 130	Basic Prehospital Care Principles (2)
FTEC 131	Field Assessing and Reporting (1.5)
FTEC 132	Prehospital Care Pharmacology (1.5)
FTEC 133	Basic and Advanced Life Support (6.5)
FTEC 134	Medical Emergencies (4)
FTEC 135	Traumatic Emergencies (2)
FTEC 136	Special Patient Emergencies (2)
FTEC 137	Emergency Medical Services (EMS)/ Legal Aspects/ Documentation (2)
FTEC 138	Paramedic Clinical Internship (3)
FTEC 139	Paramedic Field Internship (8.5)

**Total Units: 33**

#### Recommended Electives:

Anatomy 30 and any college chemistry course with a laboratory

#### **Preparation for the Fire and Emergency Technology Transfer Major**

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

**Certificates of Achievement**

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

**Fire and Emergency Technology Certificate of Achievement**

Course	Title
FTEC 1	Fire Protection Organization (3)
FTEC 2	Fire Prevention Technology (3)
FTEC 3	Fundamentals of Personal Fire Safety and Survival (3)
FTEC 5	Fire Behavior and Combustion (3)
FTEC 6	Building Construction for Fire Protection (3)
FTEC 10	Hazardous Materials (3)
FTEC 20	Fire Protection Equipment and Systems (3)
FTEC 144	Emergency Medical Technician (6)

**Total Units: 27**

**Fire Academy Certificate of Achievement**

Course	Title
<i>Required Core: 24 units</i>	
FTEC 1	Fire Protection Organization (3)
FTEC 15	Fire Academy (15)
FTEC 144	Emergency Medical Technician (6)
<i>3 units from:</i>	
FTEC 2	Fire Prevention Technology (3)
FTEC 3	Fundamentals of Personal Fire Safety and Survival (3)
FTEC 5	Fire Behavior and Combustion (3)
FTEC 6	Building Construction for Fire Protection (3)
FTEC 9	Fire Apparatus and Equipment (3)
FTEC 10	Hazardous Materials (3)
FTEC 11	Arson Detection and Control (3)
FTEC 19	Fire Service Entrance Preparation (3)
FTEC 20	Fire Protection Equipment and Systems (3)

**Total Units: 27**

Other requirements: Completion of Candidate Physical Agility Test (CPAT) or Fire Fighter Physical Agility Test (FPAT)

**Certificate of Achievement - Paramedical Technician:**

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

1. Provide verification of Emergency Medical Technician-1 (EMT-1) certification within the last 12 months
2. Provide verification of at least 6 months experience as an EMT-1 in a pre-hospital setting
3. Complete Fire and Emergency Technology 15 or equivalent
4. Pass a medical examination according to the National Fire Protection Association (NFPA) Standard #1582
5. Furnish proof of rubella immunity, Tuberculosis (TB) test and Hepatitis B vaccine

In addition to the program prerequisites, it is recommended that students be eligible, through assessment or coursework, for English 1A and Mathematics 80.

Required Courses (after meeting above requirements):

**Paramedical Technician Certificate of Achievement**

Course	Title
FTEC 130	Basic Prehospital Care Principles (2)
FTEC 131	Field Assessing and Reporting (1.5)
FTEC 132	Prehospital Care Pharmacology (1.5)
FTEC 133	Basic and Advanced Life Support (6.5)
FTEC 134	Medical Emergencies (4)
FTEC 135	Traumatic Emergencies (2)
FTEC 136	Special Patient Emergencies (2)
FTEC 137	Emergency Medical Services (EMS)/ Legal Aspects/Documentation (2)
FTEC 138	Paramedic Clinical Internship (3)
FTEC 139	Paramedic Field Internship (8.5)

**Total Units: 33**

**Recommended Electives:**

Anatomy 30 and any college chemistry course with a laboratory

For Gainful Employment program information, please visit [www.elcamino.edu/academics/indtech/fireacademy](http://www.elcamino.edu/academics/indtech/fireacademy)

**Fire and Emergency Technology 1***Fire Protection Organization**3 units; 3 hours lecture**Recommended Preparation: eligibility for English 1A**Credit, degree applicable**Transfer CSU*

This course provides an introduction to fire protection. Emphasis is placed on career opportunities in fire protection and related fields and the philosophy and history of fire protection. Additional topics include fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government; laws and regulations affecting the fire service; fire service; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems; and introduction to fire strategy and tactics.

**Fire and Emergency Technology 2***Fire Prevention Technology**3 units; 3 hours lecture**Recommended Preparation: Fire and Emergency Technology 1 or 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 3***Fundamentals of Personal Fire Safety and Survival**3 units; 3 hours lecture**Recommended Preparation: Fire and Emergency Technology 1 and eligibility for English 1A**Credit, degree applicable**Transfer CSU*

This course introduces the basic principles and history related to the national firefighter life safety initiatives. Emphasis will be placed on the need for cultural and behavior change throughout emergency services. Focus is placed on assessing fire dangers and handling common fire situations.

**Fire and Emergency Technology 4***Fire Company Organization and Management**3 units; 3 hours lecture**Recommended Preparation: Fire and Emergency Technology 1 and 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 and eligibility for English 1A**Credit, degree applicable**Transfer CSU*

This course examines the theory and fundamentals of how and why fires start, spread, and are controlled, as well as an in-depth study of fire chemistry and physics, fire characteristics of materials, extinguishing agents and fire control techniques.

**Fire and Emergency Technology 6***Building Construction for Fire Protection**3 units; 3 hours lecture**Recommended Preparation:**Fire and Emergency Technology 1 and 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 9***Fire Apparatus and Equipment**3 units; 3 hours lecture**Recommended Preparation:**Fire and Emergency Technology 1 or 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 15 and English 1A**Credit, degree applicable**Transfer CSU*

This course is a study of firefighting practices related to hazardous chemicals and their physical properties, uses in industry, and characteristics when involved in spills, 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 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 15****Fire Academy***15 units; 9 hours lecture, 18.5 hours lab**Prerequisite:*

1. *Fire and Emergency Technology 1 with a minimum grade of C or equivalent*

2. *Fire and Emergency Technology 6 with a minimum grade of C or equivalent*

3. *Possession of a National Registry Card or possession of a valid Emergency Medical Technician (EMT) license as required by the California State Fire Marshal's Office*

4. *Pass a Fire Fighter Physical Agility Test (FPAT) or Candidate Physical Agility Test (CPAT) within the last 6 months as required by the California State Fire Marshal's Office*

5. *Pass a physical examination according to the National Fire Protection Association (NFPA) Standard #1582*

6. *Pass the El Camino College Fire Physical Qualification Test*

7. *Possess a valid California driver's license*

*Credit, degree applicable*

This course is designed for students who wish to prepare for entry-level positions as a firefighter and work toward becoming certified as a Fire Fighter 1, as specified by the California State Fire Marshal's Office. Students participate in a 495-hour course of instruction emphasizing basic firefighting skills such as methods of extinguishing fires, principles of ventilation, techniques of physical rescue, building construction, fire apparatus, fire equipment maintenance, and the knowledge of fire behavior.

*Note: Students must apply through the Industry and Technology Division Office.*

**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**Mathematics 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 1A**Credit, degree applicable**Transfer CSU*

This course addresses the features of design and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems, water supply for fire protection and portable fire extinguishers.

**Fire and Emergency Technology 95**

(formerly 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\**

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Fire and Emergency Technology field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

*\*Note: Transfer limitations apply.*

*Note: The total units earned for Cooperative Work Experience Education may not exceed 16 units.*

**Fire and Emergency Technology 99**

(formerly 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\**

This course provides special advanced studies in a subject field of Fire and Emergency Technology not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Fire and Emergency Technology projects (54 hours per unit).

*\*Note: Transfer limitations apply.*

*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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**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 pass/no pass option.***Fire and Emergency Technology 130****Basic Prehospital Care Principles***2 units; 3 hours lecture to be arranged (13 week course)**Enrollment Limitation:**admission to Paramedical Technician Program**Credit, degree applicable*

This course provides an introduction to medical terminology, along with a review of surface anatomy and physiology. The course presents an overview of the human nervous system, cardiovascular system, and respiratory system. Aseptic techniques will be described and demonstrated.

**Fire and Emergency Technology 131****Field Assessing and Reporting***1.5 units; 2 hours lecture, 1 hour lab to be arranged (13 week course)**Enrollment Limitation:**admission to Paramedical Technician Program**Credit, degree applicable*

This course covers assessment techniques used in a 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 to be arranged (13 week course)**Enrollment Limitation:**admission to Paramedical Technician Program**Credit, degree applicable*

This course provides an introduction to the study of drugs and their ongoing nature and effect on living tissue. A study of the various drugs that are available to the prehospital care technician is presented along with medication administration techniques. An introduction to intravenous (IV) therapy and drug therapy is covered.

**Fire and Emergency Technology 133****Basic and Advanced Life Support***6.5 units; 9 hours lecture to be arranged (13 week course)**Enrollment Limitation:**admission to Paramedical Technician Program**Credit, degree applicable*

This course provides students with a review of cardiopulmonary resuscitation (CPR) techniques and sophisticated forms of airway management. The course presents an introduction and interpretation of electrocardiogram (EKG) rhythms with the use of an oscilloscope. Drugs used in cardiac arrest situations are discussed. Simulation exercises are conducted throughout the course.

**Fire and Emergency Technology 134****Medical Emergencies***4 units; 6 hours lecture, 1 hour lab to be arranged (13 week course)**Enrollment Limitation:**admission to Paramedical Technician Program**Credit, degree applicable*

This course covers a variety of medical emergencies that a paramedic is most likely to encounter. Topics presented include, but are not limited to communicable diseases, chest pain, drug abuse/poisonings, diabetes, neurological complications, and respiratory distress.

**Fire and Emergency Technology 135****Traumatic Emergencies***2 units; 3 hours lecture to be arranged (13 week course)**Enrollment Limitation:**admission to Paramedical Technician Program**Credit, degree applicable*

This course covers the causes and treatment of bodily injuries due to trauma. Topics include maxillofacial and soft tissue injuries, burns, head, spinal, chest and abdominal wounds, emergency childbirth and multi-casualty incidents.

**Fire and Emergency Technology 136****Special Patient Emergencies***2 units; 3 hours lecture to be arranged (13 week course)**Enrollment Limitation:**admission to Paramedical Technician Program**Credit, degree applicable*

This course focuses on emergencies which involve unresponsive patients, 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 to be arranged (13 week course)**Enrollment Limitation:**admission to Paramedical Technician Program**Credit, degree applicable*

This course covers the laws and legal authority which govern the scope of practice for the paramedic. Also discussed are documentation techniques, paramedic report writing, and skills competency testing.

**Fire and Emergency Technology 138****Paramedic Clinical Internship**

3 units; 40 hours lab per week to be arranged  
(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 to be arranged  
(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.

**Fire and Emergency Technology 144****Emergency Medical Technician**

6 units; 5 hours lecture, 3 hours lab

Prerequisite: Possession of a current Cardiopulmonary Resuscitation (CPR) card (Healthcare Provider CPR card from the American Heart Association or Professional Rescuer CPR card from the American Red Cross). Card must not expire less than six months from start date of class.

Credit, degree applicable

Transfer CSU

In this course, students will study through lecture and hands-on practical training, the basic skills necessary for the assessment, rescue, immediate treatment and transport of the urgently ill or injured person. Course content emphasizes identifying and correcting life-threatening conditions, identifying appropriate rescue techniques, and developing a systematic approach for providing pre-hospital care.

Note: CPR cards will be checked the first day of class for admission. Students successfully completing this course with an average grade of B will be eligible to take the National Registry Emergency Medical Technician (EMT) Exam within two years.

Note: This course is repeatable.

**Fire and Emergency Technology 150****Fire Specialized Training**

2 units; 1 hour lecture per week to be arranged, 4 hours lab per week to be arranged

Prerequisite:

1. Successful completion of a California State Fire Marshal certified fire academy.
2. Proof of passing the Emergency Medical Technician (EMT) National Registry Examination.
3. Furnish proof of a current negative Tuberculosis (TB) test. Test must be taken within 12 months and valid during class period.
4. Completion of background investigation. Background investigation to be completed prior to attending the first class session. See the Division Office of Industry and Technology for details.

Credit, degree applicable

Transfer CSU

This course will acquaint the student with current changes in contemporary firefighting techniques. Major topics include fire service appliances, fire chemistry, automatic fire extinguishers and agents. Additional topics include fire prevention and enforcement, arson investigation, public safety, hazardous materials control and enforcement, communication, and emergency medical techniques.

Note: Pass/no pass only.

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 English 84

Credit, degree applicable

Transfer CSU, UC

This course follows the American Red Cross Certification Program for First Aid, Basic Life Support (infant, child, adult and two person CPR), and Automated External Defibrillation (AED). The course content includes an emphasis on prevention of injuries, safety education, and skills necessary to sustain life in the event of trauma or sudden illness. Demonstration of skill proficiency and passing written exams with 80 percent or better will qualify students for certification in American Red Cross First Aid, Community CPR, and Professional Rescuer CPR.

Note: Certifying agencies charge an administrative fee for students who pass the exams and wish to receive certification. Obtaining certification documentation from these agencies is optional. Students may be required to obtain proof of certification for other needs or outside agency requirements. El Camino College is not a certifying agency.

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

## 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.

At least 50 percent of the courses required for the French major must be completed at El Camino College. French 4 must be completed at El Camino College.

Course	Title
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**Required Core: 4 units**

FREN 4	Intermediate French II (4)
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**4-11 units from:**

FREN 1	Elementary French I (4)
FREN 2	Elementary French II (4)
FREN 3	Intermediate French I (4)
FREN 5	Advanced French I (3)
FREN 6	Advanced French II (3)
FREN 21	Beginning Conversational French (2)
FREN 22	Intermediate Conversational French (2)

**a minimum of 3 units from:**

ART 102B	History of Western Art – Proto-Renaissance to 19th Century (3)
ART 102C	History of Western Art – 19th Century to Contemporary Times (3)
ENGL 15A	Survey of British Literature I (3)
ENGL 15B	Survey of British Literature II (3)
ENGL 35	World Literature: 3500 BCE to 1650 CE (3)
ENGL 36	World Literature: 1650 CE to Present (3)
HIST 140	History of Early Civilizations (3)
HIST 141	History of Modern Civilizations (3)

**Total Units: 18**

### Preparation for the French Transfer Major

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

### French 1

#### Elementary French I

4 units; 5 hours lecture

*Recommended Preparation: eligibility for English 1A*

*Credit, degree applicable*

*Transfer CSU, UC*

This course introduces students to speaking, listening, reading and writing linguistically appropriate French. Students are also introduced to the cultural background of the language, including the relationships among cultural practices and perspectives and general aspects of everyday life. Technological support may include videos, DVDs, audio CDs, and Internet access to publishers' websites for tutoring and other support.

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

### 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 francophone writings.

*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 francophone writings 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 francophone writers. Students read and summarize the works of representative francophone writers to acquire fluency in the language. Written French, with an emphasis on vocabulary building and functional grammar, is also included.

**French 6****Advanced French II***3 units; 3 hours lecture**Prerequisite: French 5 with a minimum grade of C or equivalent**Credit, degree applicable**Transfer CSU, UC*

This advanced course, taught within the context of French culture, introduces students to French literary criticism. Students learn how to write critically about the works of representative francophone writers to acquire fluency in the language and to improve their explication de text skills. Written French, with an emphasis on vocabulary building and functional grammar, is also included.

**French 21***(formerly French 21 ab)***Beginning Conversational French***2 units; 2 hours lecture**Prerequisite: French 1 with a minimum grade of C or equivalent**Credit, degree applicable**Transfer CSU*

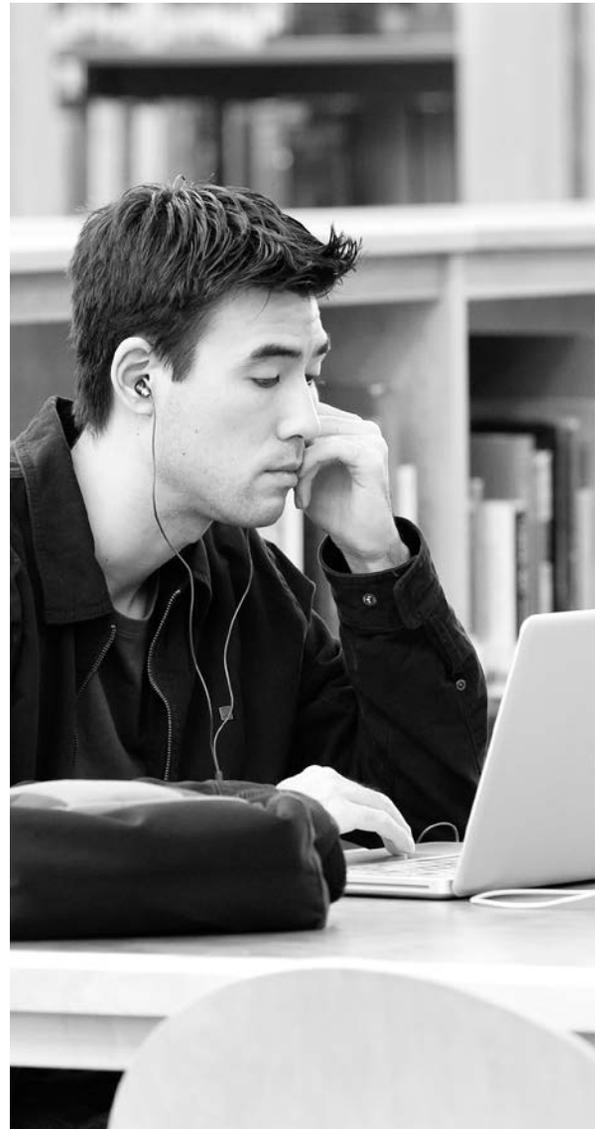
This course is designed to help students develop competency in French oral expression, oral comprehension, pronunciation, and conversational strategies.

**French 22***(formerly French 22ab)***Intermediate Conversational French***2 units; 2 hours lecture**Prerequisite: French 2 and French 21 with a minimum grade of C in prerequisite or equivalent**Credit, degree applicable**Transfer CSU, UC*

This course is designed for the intermediate student to develop French language fluency in oral expression, increase oral comprehension, and improve pronunciation. Conversational topics are based upon the daily experiences and cultural life of the ethnic areas involved with the French language.

**French 99***(formerly 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\**

This course provides special advanced studies in a subject field of French education not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned French education projects (54 hours per unit).

*\*Note: Transfer limitations apply.**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.

#### Course Title

**Required Core: 7-10 units**

**Complete one of the following two-semester sequences:**

BIOL 101	Principles of Biology I (5)
BIOL 102	Principles of Biology II (5)
or	
CHEM 1A	General Chemistry I (5)
CHEM 1B	General Chemistry II (5)
or	
CHEM 21A	Survey of General and Organic Chemistry (4)
CHEM 21B	Survey of Organic and Biochemistry (4)
or	
PHYS 1A	Mechanics of Solids (4)
PHYS 1B	Fluids, Heat and Sound (3)
or	
PHYS 1A	Mechanics of Solids (4)
PHYS 1C	Electricity and Magnetism (4)
or	
PHYS 2A	General Physics (4)
PHYS 2B	General Physics (4)
or	
PHYS 3A	General Physics with Calculus (5)
PHYS 3B	General Physics with Calculus (5)

**Complete an additional 10-13 units from:  
a minimum of one Physical Science course:**

ASTR 12	Astronomy Laboratory (1)
ASTR 20	The Solar System (3)
or	
ASTR 20H	Honors The Solar System (3)
ASTR 25	Stars and Galaxies (3)
CHEM 1A	General Chemistry I (5)
CHEM 1B	General Chemistry II (5)
CHEM 4	Beginning Chemistry (5)
CHEM 21A	Survey of General and Organic Chemistry (4)
CHEM 21B	Survey of Organic and Biochemistry (4)
GEOL 1	Physical Geology (3)
GEOL 2	History of Planet Earth (3)
GEOL 3	Physical Geology Laboratory (1)
GEOL 4	History of Planet Earth Laboratory (1)
GEOL 15	Natural Disasters (3)

**a minimum of one Biological Science course:**

ANAT 32	General Human Anatomy (4)
BIOL 8	Biology of Plants (4)
BIOL 10	Fundamentals of Biology (4)
or	
BIOL 10H	Honors Fundamentals of Biology (4)
BIOL 11	Fundamentals of Zoology (4)
BIOL 12	Field Zoology (4)
BIOL 16	Field Entomology (4)
BIOL 17	Marine Biology (3)
BIOL 18	Marine Biology Laboratory (1)
BIOL 101	Principles of Biology I (5)
BIOL 102	Principles of Biology II (5)
MICR 33	General Microbiology (5)
PHYO 31	Human Physiology (4)

**Total Units: 20**



## 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

General Education:

Choose one of the following patterns:

1. Associate Degree General Education Requirements (minimum of 24 units and the math competency requirement).
2. CSU General Education Breadth (39 units) – This general education pattern will fulfill lower-division general education requirements at the CSU campuses.
3. Intersegmental General Education Transfer Curriculum (IGETC) (34 units) – This general education pattern will fulfill lower-division requirements at the CSU, UC and some private colleges and universities.

Area of Emphasis:

1. A minimum of 18 units are required in one Area of Emphasis listed below.
2. A minimum of one course from two different disciplines is required in the emphasis.
3. The courses selected in the emphasis may also be used to fulfill general education areas on the Associate Degree, CSU General Education Breadth, or IGETC.

Electives:

Elective units may be necessary to obtain the 60 degree applicable units that are required for the Associate Degree.

#### 1. Area of Emphasis in Arts and Humanities:

These courses emphasize the appreciation of arts and humanities through cultural activities and artistic expression of human beings. Students will evaluate and interpret the ways in which people through the ages in different cultures have responded to themselves and the world around them in artistic and cultural creation. Students interested in transferring to a four-year university will have a basic foundation for further studies in areas such as arts, communications, English, foreign language, film studies, literature, history, journalism, or philosophy. This emphasis may be useful for students interested in possible career paths in fine arts, education, administration, or public service.

Select 18 units with at least one course in Arts and one course in Humanities.

Course	Title
<b>Arts:</b>	
ARCH 104	History of Western Architecture (3)
ART 101	Art and Visual Culture : A Global Perspective (3)
ART 102A	History of Western Art – Prehistoric to Gothic (3)
ART 102B	History of Western Art – Proto-Renaissance to 19th Century (3)
ART 102C	History of Western Art – 19th Century to Contemporary Times (3)
ART 106	Cross-Cultural Art (3)
ART 109	Contemporary Art in World Cultures (3)
ART 150	The Art of Photography (3)
ART 205A	History of Asian Art – India and Southeast Asia (3)
ART 205B	History of Asian Art – China, Korea and Japan (3)
ART 207	Art History of Mexico and Central and South America (3)
ART 208	History of American Art (3)
or	
ART 208H	Honors History of American Art (3)
ART 209	History of African Art (3)
COMS 250	Oral Interpretation of Literature (3)
DANC 101	Dance Appreciation (3)
DANC 103	History of Dance in the 20th Century (3)
DANC 105	Music for Dance (2)
FILM 110	Film Analysis and Appreciation (3)
FILM 113	Screenplay Analysis (3)
MUSI 101	Music Fundamentals (3)
MUSI 111	Music Appreciation Survey (3)
MUSI 112	Music Cultures of the World (3)
MUSI 113	Survey of Jazz (3)
MUSI 116	History of Rock Music (3)
MUSI 117	Music of the Beatles (3)
MUSI 215A	Music History and Literature up to 1750 (3)
MUSI 215B	Music History and Literature – 1750 to Present (3)
PHOT 150	The Art of Photography (3)
THEA 103	Theatre Appreciation (3)
THEA 104	Dramatic Literature (3)
THEA 113	Introduction to Acting (3)
<b>Humanities:</b>	
CHIN 1	Elementary Chinese I (4)
CHIN 2	Elementary Chinese II (4)
CHIN 3	Intermediate Chinese I (4)
CHIN 24	Introduction to Chinese Language and Culture (3)
COMS 100	Public Speaking (3)
COMS 120	Argumentation and Debate (3)
COMS 130	Interpersonal Communication (3)

## Courses

COMS 140	Small Group Communication (3)	HIST 111	The African American in the United States from 1877 to the Present (3)
COMS 260	Introduction to Intercultural Communication (3)	HIST 112	History of the Chicano in the United States (3)
COMS 265	Mass Communication (3)	HIST 122	United States Social History: Cultural Pluralism in America (3)
COMS 270	Organizational Communication (3)	HIST 128	History of California (3)
ENGL 1B	Literature and Composition (3)	HIST 129	History of Los Angeles (3)
ENGL 1BH	Honors Literature and Composition (3)	HIST 140	History of Early Civilizations (3)
ENGL 1C	Critical Thinking and Composition (3)	HIST 141	History of Modern Civilizations (3)
ENGL 1CH	Honors Critical Thinking and Composition (3)	HIST 143	Twentieth Century World History (3)
ENGL 12	Introduction to Fiction (3)	HIST 145	History of World Religions (3)
ENGL 15A	Survey of British Literature I (3)	HIST 152	History of Latin America Through Independence (3)
ENGL 15B	Survey of British Literature II (3)	HIST 154	A History of Mexico (3)
ENGL 20	Shakespeare's Plays – Tragedies and Romances (3)	HIST 162	History of Early Britain (3)
ENGL 21	Shakespeare's Plays – Comedies and Histories (3)	HIST 163	History of Modern Britain (3)
ENGL 24A	Creative Writing: Introduction to Poetry (3)	HIST 175	History of Asian Civilizations to 1600 (3)
ENGL 25A	Creative Writing: Introduction to the Craft of Fiction (3)	HIST 176	History of Asian Civilizations from 1600 to the Present (3)
ENGL 27	Children's Literature (3)	HIST 178	History of China (3)
ENGL 28	Images of Women in Literature (3)	HIST 183	Introduction to African History, Prehistory to 1885 (3)
ENGL 30	The English Bible as Literature (3)	HIST 184	Introduction to African History, 1885 to the Present (3)
ENGL 31	Mythology and Folklore (3)	HUMA 1	An Introduction to the Humanities (3)
ENGL 32	Creative Writing: A Workshop in Fiction (3)	ITAL 1	Elementary Italian I (4)
ENGL 34	The Short Story (3)	ITAL 2	Elementary Italian II (4)
ENGL 35	World Literature: 3500 BCE to 1650 CE (3)	ITAL 24	Introduction to Italian Culture (3)
ENGL 36	World Literature: 1650 CE to Present (3)	JAPA 1	Elementary Japanese I (4)
ENGL 39	Literature and Film (3)	JAPA 2	Elementary Japanese II (4)
ENGL 40A	American Literature I (3)	JAPA 3	Intermediate Japanese I (4)
ENGL 40B	American Literature II (3)	JAPA 4	Intermediate Japanese II (4)
ENGL 41B	Survey of Film: 1950 to the Present (3)	JAPA 25	Cultural Aspects of the Japanese Language (3)
ENGL 42	Chicano and Latino Literature (3)	JOUR 1	News Writing and Reporting (3)
ENGL 43	African American Literature (3)	JOUR 12	Mass Media and Society (3)
ENGL 44	The Literature of American Ethnic Groups (3)	PHIL 101	Introduction to Philosophy (3)
ENGL 78	Creative Writing: Screenwriting (3)	PHIL 103	Ethics and Society (3)
FILM 153	American Independent Cinema (3)	PHIL 105	Critical Thinking and Discourse (3)
FILM 154	Regional Cinemas (3)	PHIL 106	Introduction to Symbolic Logic (3)
FREN 1	Elementary French I (4)	PHIL 107	Philosophy of Religion (3)
FREN 2	Elementary French II (4)	PHIL 111	History of Ancient and Medieval Philosophy (3)
FREN 3	Intermediate French I (4)	PHIL 112	History of Modern Philosophy (3)
FREN 4	Intermediate French II (4)	PHIL 113	Contemporary Philosophy (3)
FREN 5	Advanced French I (3)	PHIL 114	Asian Philosophy (3)
FREN 6	Advanced French II (3)	PHIL 115	Existentialism (3)
GERM 1	Elementary German I (4)	PHIL 117	Political Philosophy (3)
GERM 2	Elementary German II (4)	PHIL 120	Ethics, Law and Society (3)
HIST 101	United States History to 1877 (3)	POLI 7	Political Philosophy (3)
HIST 102	United States History from 1877 to the Present (3)	SLAN 111	American Sign Language I (4)
HIST 105	Women and American History from the Colonial Era to 1877 (3)	SLAN 112	American Sign Language II (4)
HIST 106	Women and American History from 1877 to the Present (3)	SLAN 113	American Sign Language III (4)
HIST 108	United States History: The American Indian Experience (3)	SLAN 114	American Sign Language IV (4)
HIST 110	The African American in the United States to 1877 (3)	SLAN 115	American Sign Language V (4)
		SLAN 130	Deaf Culture (3)
		SPAN 1	Elementary Spanish I (4)

SPAN 2	Elementary Spanish II (4)
SPAN 3	Intermediate Spanish I (4)
SPAN 4	Intermediate Spanish II (4)
SPAN 5	Advanced Spanish I (3)
SPAN 6	Advanced Spanish II (3)
SPAN 52A	Spanish for Native Speakers I (4)
SPAN 52B	Spanish for Native Speakers II (4)

**Total Units: 18**

*Note: ART 150 is the same course as PHOT 150. Course credit is limited to ART 150 or PHOT 150.*

*Note: PHIL 117 is the same course as POLI 7. Course credit is limited to PHIL 117 or POLI 7.*

**2. Area of Emphasis in Fine and Applied Arts:**

These courses will emphasize the nature of artistic activities and expression of art through analysis, examination, performance, and technical development. Students will incorporate techniques, engage in performance, and learn to value aesthetic understanding and integrate these concepts when constructing value judgments. Students transferring to a four-year university will have a basic foundation for further studies in areas such as architecture, art, digital media, creative writing, dance, film, music, performing arts, photography, studio art, or theatre arts. This emphasis may be useful for students interested in possible career paths in design, graphic arts, visual arts, photography, stage technician, musician, education, television, journalism, or acting.

Select 18 units from at least two disciplines.

**Course Title**

ARCH 104	History of Western Architecture (3)	ART 207	Art History of Mexico and Central and South America (3)
ARCH 150A	Construction Documentation I (3)	ART 209	History of African Art (3)
ARCH 150 B	Architectural Drafting II (3)	ART 210	Drawing Fundamentals II (3)
ARCH 199	Architecture Design Studio (4)	ART 217	Life Drawing I (3)
ART 101	Art and Visual Culture : A Global Perspective (3)	ART 218	Life Drawing II (3)
ART 102A	History of Western Art – Prehistoric to Gothic (3)	ART 219	Watercolor Painting I (3)
ART 102B	History of Western Art – Proto-Renaissance to 19th Century (3)	ART 222	Fundamentals of Painting I (3)
ART 102C	History of Western Art – 19th Century to Contemporary Times (3)	ART 223A	Fundamentals of Painting II (3)
ART 106	Cross-Cultural Art (3)	ART 282	Life Sculpture (3)
ART 110	Drawing Fundamentals I (3)	DANC 101	Dance Appreciation (3)
ART 130	Two-Dimensional Design I (3)	DANC 103	History of Dance in the 20th Century (3)
ART 131	Lettering and Typography I (3)	DANC 105	Music for Dance (2)
ART 141	Digital Art Fundamentals (3)	DANC 120A	Beginning Ballet A (2)
ART 142	Digital Photography (3)	DANC 130A	Beginning Modern Dance A (2)
ART 143	Digital Publishing Fundamentals (3)	DANC 140	Jazz Dance I (2)
ART 150	The Art of Photography (3)	DANC 220A	Intermediate Ballet A (2)
ART 160	Three-Dimensional Design (3)	DANC 230A	Intermediate Modern Dance A (2)
ART 161	Beginning Ceramics (3)	DANC 240	Jazz Dance II (2)
ART 181	Beginning Sculpture (3)	ENGL 24A	Creative Writing: Introduction to Poetry (3)
ART 205A	History of Asian Art – India and Southeast Asia (3)	ENGL 25A	Creative Writing: Introduction to the Craft of Fiction (3)
ART 205B	History of Asian Art – China, Korea and Japan (3)	ENGL 78	Creative Writing: Screenwriting (3)
		FILM 110	Film Analysis and Appreciation (3)
		FILM 113	Screenplay Analysis (3)
		FILM 114	Story Development (3)
		FILM 120	Introduction to Film/Video Production (3)
		FILM 121	Audio Production (3)
		FILM 122	Production I (3)
		FILM 153	American Independent Cinema (3)
		FILM 154	Regional Cinemas (3)
		FILM 232	Production II (3)
		MUSI 101	Music Fundamentals (3)
		MUSI 102A	Beginning Sightsinging (2)
		MUSI 102B	Advanced Sightsinging (2)
		MUSI 103A	Theory and Musicianship I (4)
		MUSI 103B	Theory and Musicianship II (4)
		MUSI 111	Music Appreciation Survey (3)
		MUSI 112	Music Cultures of the World (3)
		MUSI 113	Survey of Jazz (3)
		MUSI 116	History of Rock Music (3)
		MUSI 120	Voice Class I (2)
		MUSI 131A	Beginning Piano I (2)
		MUSI 131B	Beginning Piano II (2)
		MUSI 190abcd	Applied Music/Individual Lessons (1)
		MUSI 203	Theory and Musicianship III (4)
		MUSI 215A	Music History and Literature up to 1750 (3)
		MUSI 215B	Music History and Literature – 1750 to Present (3)
		MUSI 220	Voice Class II (2)
		MUSI 231A	Intermediate Piano I (2)
		MUSI 231B	Intermediate Piano II (2)
		PHOT 101	Elementary Photography (2)
		PHOT 102	Basic Photography (3)
		PHOT 150	The Art of Photography (3)
		PHOT 202	Intermediate Photography (4)

THEA 103	Theatre Appreciation (3)
THEA 104	Dramatic Literature (3)
THEA 113	Introduction to Acting (3)
THEA 114	Fundamentals of Acting (3)
THEA 184	Stagecraft (3)
THEA 185	Introduction to Stage Lighting (3)
THEA 188	Fundamentals of Stage Makeup (3)
THEA 189	Costuming for the Stage (3)
THEA 214A	Intermediate Acting (3)

**Total Units: 18**

Note: ART 150 is the same course as PHOT 150. Course credit is limited to ART 150 or PHOT 150.

**3. Area of Emphasis in Culture and Communication:**

These courses will emphasize the study of communication, culture, and the skills needed to communicate effectively in oral, written, or visual forms. Students transferring to a four-year university will have a basic foundation for further studies in communication studies, media studies, journalism, English, or modern languages. This emphasis may be useful for students interested in possible career paths in broadcasting, public relations, advertising, journalism, interpreter, photography, technical writing, or radio and television.

Select 18 units from at least two disciplines.

Course	Title
ANTH 4	Language and Culture (3)
ART 143	Digital Publishing Fundamentals (3)
CHIN 1	Elementary Chinese I (4)
CHIN 2	Elementary Chinese II (4)
CHIN 3	Intermediate Chinese I (4)
CHIN 24	Introduction to Chinese Language and Culture (3)
COMS 100	Public Speaking (3)
COMS 120	Argumentation and Debate (3)
COMS 130	Interpersonal Communication (3)
COMS 140	Small Group Communication (3)
COMS 250	Oral Interpretation of Literature (3)
COMS 260	Introduction to Intercultural Communication (3)
COMS 265	Mass Communication (3)
COMS 270	Organizational Communication (3)
ENGL 1B	Literature and Composition (3)
ENGL 1BH	Honors Literature and Composition (3)
ENGL 1C	Critical Thinking and Composition (3)
ENGL 1CH	Honors Critical Thinking and Composition (3)
ENGL 12	Introduction to Fiction (3)
ENGL 15A	Survey of British Literature I (3)
ENGL 15B	Survey of British Literature II (3)
ENGL 20	Shakespeare's Plays – Tragedies and Romances (3)
ENGL 21	Shakespeare's Plays – Comedies and Histories (3)
ENGL 24A	Creative Writing: Introduction to Poetry (3)
ENGL 25A	Creative Writing: Introduction to the Craft of Fiction (3)
ENGL 27	Children's Literature (3)
ENGL 28	Images of Women in Literature (3)
ENGL 30	The English Bible as Literature (3)
ENGL 31	Mythology and Folklore (3)
ENGL 34	The Short Story (3)
ENGL 35	World Literature: 3500 BCE to 1650 CE (3)
ENGL 36	World Literature: 1650 CE to Present (3)
ENGL 39	Literature and Film (3)
ENGL 40A	American Literature I (3)
ENGL 40B	American Literature II (3)
ENGL 41B	Survey of Film: 1950 to the Present (3)
ENGL 42	Chicano and Latino Literature (3)
ENGL 43	African American Literature (3)
ENGL 44	The Literature of American Ethnic Groups (3)
ENGL 78	Creative Writing: Screenwriting (3)
FILM 120	Introduction to Film/Video Production (3)
FILM 122	Production I (3)
FILM 124	Production Planning (3)
FILM 128	Television Production (3)
FILM 153	American Independent Cinema (3)
FILM 154	Regional Cinemas (3)
FILM 232	Production II (3)
FREN 1	Elementary French I (4)
FREN 2	Elementary French II (4)
FREN 3	Intermediate French I (4)
FREN 4	Intermediate French II (4)
FREN 5	Advanced French I (3)
FREN 6	Advanced French II (3)
GERM 1	Elementary German I (4)
GERM 2	Elementary German II (4)
ITAL 1	Elementary Italian I (4)
ITAL 2	Elementary Italian II (4)
ITAL 24	Introduction to Italian Culture (3)
JAPA 1	Elementary Japanese I (4)
JAPA 2	Elementary Japanese II (4)
JAPA 3	Intermediate Japanese I (4)
JAPA 4	Intermediate Japanese II (4)
JAPA 25	Cultural Aspects of the Japanese Language (3)
JOUR 1	News Writing and Reporting (3)
JOUR 7ab	Advanced Photojournalism (2)
JOUR 12	Mass Media and Society (3)
LIBR 1	Introduction to Library Information Science (1)
LIBR 10	Library Research Using the Internet (1)
PHOT 101	Elementary Photography (2)
PHOT 102	Basic Photography (3)
PHOT 206ab	Advanced Photojournalism (2)
SLAN 111	American Sign Language I (4)
SLAN 112	American Sign Language II (4)
SLAN 113	American Sign Language III (4)
SLAN 114	American Sign Language IV (4)
SLAN 115	American Sign Language V (4)
SLAN 130	Deaf Culture (3)

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

**Total Units: 18**

Note: JOUR 7ab is the same course as PHOT 206ab. Course credit is limited to JOUR 7ab or PHOT 206ab.

**4. Area of Emphasis in Social and Behavioral Sciences:**

These courses emphasize an appreciation and understanding of how members of diverse societies operate or have operated as individuals and social groups. Courses in the social and behavioral sciences will help students to develop an awareness of methods of inquiry and stimulate critical thinking about the ways in which people act and interact within social and cultural contexts. Students will study the perspectives, concepts, principles, theories, and methodologies of disciplines within social and behavioral sciences. Students transferring to a four-year university will have a basic foundation for further studies in areas such as American studies, anthropology, criminal justice, child development, economics, geography, history, political science, psychology, or sociology. This emphasis may be useful for students interested in possible career paths in education, history, social work, public administration, public service agencies, library science, economics, or social policy.

Select 18 units from at least two disciplines.

<b>Course</b>	<b>Title</b>
AJ 100	Introduction to Administration of Justice (3)
AJ 103	Concepts of Criminal Law I (3)
AJ 107	Crime and Control – An Introduction to Corrections (3)
AJ 111	Criminal Investigation (3)
AJ 115	Community and Human Relations (3)
ASTU 7	History of American Popular Culture (3)
ANTH 2	Introduction to Cultural Anthropology (3)
ANTH 3	Introduction to Archaeology (3)
ANTH 4	Language and Culture (3)
ANTH 6	Native Peoples of North America (3)
ANTH 7	Native Peoples of South America (3)
ANTH 8	Ancient Civilizations of Mesoamerica (3)
ANTH 9	Women, Culture, and Society (3)
ANTH 11	Anthropology of Religion, Magic and Witchcraft (3)
CDEV 103	Child Growth and Development (3)
CDEV 104	The Home, The School, The Community (3)
COMS 260	Introduction to Intercultural Communication (3)
COMS 265	Mass Communication (3)
ECON 5	Fundamentals of Economics (3)

ECON 1	Principles of Economics: Macroeconomics (3)
ECON 2	Principles of Economics: Microeconomics Theory (3)
EDUC 201	Foundations in Education (3)
ESTU 1	Introduction to Ethnic Studies (3)
ESTU 3	The Chicano in Contemporary United States Society (3)
ESTU 5	Chicano Culture (3)
GEOG 2	Cultural Geography (3)
GEOG 5	World Regional Geography (3)
GEOG 7	Geography of California (3)
HIST 101	United States History to 1877 (3)
HIST 102	United States History from 1877 to the Present (3)
HIST 105	Women and American History from the Colonial Era to 1877 (3)
HIST 106	Women and American History from 1877 to the Present (3)
HIST 108	United States History: The American Indian Experience (3)
HIST 110	The African American in the United States to 1877 (3)
HIST 111	The African American in the United States from 1877 to the Present (3)
HIST 112	History of the Chicano in the United States (3)
HIST 122	United States Social History: Cultural Pluralism in America (3)
HIST 128	History of California (3)
HIST 129	History of Los Angeles (3)
HIST 140	History of Early Civilizations (3)
HIST 141	History of Modern Civilizations (3)
HIST 143	Twentieth Century World History (3)
HIST 145	History of World Religions (3)
HIST 152	History of Latin America Through Independence (3)
HIST 154	A History of Mexico (3)
HIST 162	History of Early Britain (3)
HIST 163	History of Modern Britain (3)
HIST 175	History of Asian Civilizations to 1600 (3)
HIST 176	History of Asian Civilizations from 1600 to the Present (3)
HIST 178	History of China (3)
HIST 183	Introduction to African History, Prehistory to 1885 (3)
HIST 184	Introduction to African History, 1885 to the Present (3)
JOUR 12	Mass Media and Society (3)
PE 275	Sport Psychology (3)
PHIL 117	Political Philosophy (3)
POLI 1	Governments of the United States and California (3)
POLI 2	Introduction to Comparative Politics (3)
POLI 3	Introduction to Principles and Methods of Political Science (3)
POLI 5	Ethnicity in the American Political Process (3)

POLI 6	Civil Rights and Liberties in the United States (3)
POLI 7	Political Philosophy (3)
POLI 10	Introduction to International Relations (3)
PSYC 2	Psychology for Effective Living (3)
PSYC 3	Critical Thinking and Psychology (3)
PSYC 5	General Psychology (3)
PSYC 7	Physiological Psychology (3)
PSYC 8	Social Psychology (3)
PSYC 9A	Introduction to Elementary Statistical Methods for the Study of Behavior (4)
PSYC 9B	Experimental Methods in the Study of Behavior (4)
PSYC 10	African American Psychology (3)
PSYC 12	Human Sexuality (3)
PSYC 15	Abnormal Psychology (3)
PSYC 16	Lifespan Development (3)
PSYC 17	Cultural Psychology (3)
SLAN 130	Deaf Culture (3)
SOCI 101	Introduction to Sociology (3)
SOCI 102	The Family (3)
SOCI 104	Social Problems (3)
SOCI 107	Issues of Race and Ethnicity in the United States (3)
SOCI 108	Global Perspectives on Race and Ethnicity (3)
SOCI 109	Introduction to Elementary Statistical Methods for the Study of Behavior (4)
SOCI 112	Introduction to Criminology (3)
WSTU 1	Introduction to Women's Studies (3)

**Total Units: 18**

Note: POLI 7 is the same course as PHIL 117. Course credit is limited to POLI 7 or PHIL 117.

**5. Area of Emphasis in Biological and Physical Sciences:**

These courses emphasize the physical universe, its life forms, and its natural phenomena. Courses in the sciences will help students develop an understanding of the scientific method and the relationship between science and other human activities. Students transferring to a four-year university will have a basic foundation for further studies in areas such as biology (biochemistry, biophysics, molecular and cell biology, marine biology, microbiology), chemistry, physical and earth sciences (astronomy, geology, physical geography, oceanography), or physics. This emphasis may be useful for students interested in possible career paths in life sciences, physiology, exercise science, physical sciences, or earth sciences.

Select 18 units with at least one course in Biological Sciences and one course in Physical Sciences.

**Course Title****Biological Sciences:**

ANAT 30	Essentials of Anatomy and Physiology (4)
ANAT 32	General Human Anatomy (4)
APHY 34A	Anatomy and Physiology I (4)
APHY 34B	Anatomy and Physiology II (4)
ANTH 1	Introduction to Physical Anthropology (3)
ANTH 5	Physical Anthropology Laboratory (1)
BIOL 8	Biology of Plants (4)
BIOL 10	Fundamentals of Biology (4)
or	
BIOL 10H	Honors Fundamentals of Biology (4)
BIOL 11	Fundamentals of Zoology (4)
BIOL 12	Field Zoology (4)
BIOL 15	Environmental Aspects of Biology (3)
BIOL 16	Field Entomology (4)
BIOL 17	Marine Biology (3)
BIOL 18	Marine Biology Laboratory (1)
BIOL 101	Principles of Biology I (5)
BIOL 102	Principles of Biology II (5)
BIOL 103	Fundamentals of Molecular Biology (3)
MICR 33	General Microbiology (5)
PHYO 31	Human Physiology (4)
PSYC 7	Physiological Psychology (3)

**Physical Science:**

ASTR 12	Astronomy Laboratory (1)
ASTR 20	The Solar System (3)
or	
ASTR 20H	Honors The Solar System (3)
ASTR 25	Stars and Galaxies (3)
CHEM 1A	General Chemistry I (5)
CHEM 1B	General Chemistry II (5)
CHEM 4	Beginning Chemistry (5)
CHEM 7A	Organic Chemistry I (5)
CHEM 7B	Organic Chemistry II (5)
CHEM 20	Fundamentals of Chemistry (5)
CHEM 21A	Survey of General and Organic Chemistry (4)
CHEM 21B	Survey of Organic and Biochemistry (4)
GEOG 1	Physical Geography (3)
GEOG 6	Physical Geography Laboratory (1)
GEOG 9	Weather and Climate (3)
GEOL 1	Physical Geology (3)
GEOL 2	History of Planet Earth (3)
GEOL 3	Physical Geology Laboratory (1)
GEOL 4	History of Planet Earth Laboratory (1)
GEOL 6	Earth Science in Education (4)
GEOL 15	Natural Disasters (3)
GEOL 30	Geology Laboratory of Death Valley (1)
GEOL 32	Geology Laboratory of Owens Valley and Sierra Nevada (1)
GEOL 34	Geology Laboratory of Southeastern California (1)
GEOL 36	Geology Laboratory of Coastal California (1)

OCEA 10	Introduction to Oceanography (4)
or	
OCEA 10H	Honors Introduction to Oceanography (4)
PHYS 1A	Mechanics of Solids (4)
PHYS 1B	Fluids, Heat and Sound (3)
PHYS 1C	Electricity and Magnetism (4)
PHYS 1D	Optics and Modern Physics (4)
PHYS 2A	General Physics (4)
PHYS 2B	General Physics (4)
PHYS 3A	General Physics with Calculus (5)
PHYS 3B	General Physics with Calculus (5)
PHYS 11	Descriptive Introduction to Physics (3)
PHYS 12	Laboratory for Introductory Physics (1)
PSCI 25	Exploring Physical Sciences (3)

**Total Units: 18****6. Area of Emphasis in Kinesiology and Wellness:**

These courses emphasize lifelong understanding and the development of a student's physiological, psychological, and social well-being. Students transferring to a four-year university will have a basic foundation for further studies in areas such as physical education, recreation, nutrition, or allied health fields. This emphasis may be useful for students interested in possible career paths in athletic training, personal training, management, exercise science, sports nutrition, and education.

Select a total of 18 units from the following disciplines:

**Course Title****Physical Education: 6 units**

PE 217	Sports Officiating (2)
PE 270	Fitness and Sports Nutrition (3)
PE 272	Care and Prevention of Athletic Injuries (3)
PE 275	Sport Psychology (3)
PE 277	Introduction to Kinesiology and Physical Education (3)
PE 280	Exercise and Nutrition Programs for Fitness and Weight Management (3)
PE 290	Personal Fitness Trainer (3)

**Science and Nutrition: 3 units**

ANAT 30	Essentials of Anatomy and Physiology (4)
ANAT 32	General Human Anatomy (4)
APHY 34A	Anatomy and Physiology I (4)
APHY 34B	Anatomy and Physiology II (4)
BIOL 10	Fundamentals of Biology (4)
or	
BIOL 10H	Honors Fundamentals of Biology (4)
BIOL 101	Principles of Biology I (5)
BIOL 102	Principles of Biology II (5)
CHEM 1A	General Chemistry I (5)
CHEM 4	Beginning Chemistry (5)
CHEM 20	Fundamentals of Chemistry (5)
CHEM 21A	Survey of General and Organic Chemistry (4)
CHEM 21B	Survey of Organic and Biochemistry (4)
MICR 33	General Microbiology (5)
NFOO 11	Nutrition (3)
PHYS 2A	General Physics (4)
PHYS 2B	General Physics (4)
PHYS 11	Descriptive Introduction to Physics (3)
PHYO 31	Human Physiology (4)

**Social Sciences and Development: 3 units**

CH 1	Personal and Community Health Issues (3)
HDEV 110	Strategies for Creating Success in College and in Life (3)
PSYC 5	General Psychology (3)
SOCI 101	Introduction to Sociology (3)

**Elective Courses: 6 units**

FAID 1	First Aid, Cardiopulmonary Resuscitation (CPR) and Basic Emergency Care (3)
NFOO 15	Nutrition for Infants and Young Children (3)
PSYC 2	Psychology for Effective Living (3)
PSYC 12	Human Sexuality (3)
PSYC 16	Lifespan Development (3)

**Total Units: 18**

## 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.

#### Preparation for the Geography Transfer Major

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

## GEOGRAPHY

### AA-T 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.

The Associate in Arts for Transfer (AA-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AA-T are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AA-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AA-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AA-T.

#### Course Title

##### Required Core: 7 units

GEOG 1	Physical Geography (3)
GEOG 2	Cultural Geography (3)
GEOG 6	Physical Geography Laboratory (1)

##### List A: 6-7 units

GEOG 5	World Regional Geography (3)
GEOG 7	Geography of California (3)
GEOG 8	Introduction to Geographic Information Systems (4)
GEOG 9	Weather and Climate (3)

##### List B: 6 units

##### Any course from List A not already completed

ANTH 2	Introduction to Cultural Anthropology (3)
GEOG 1	Physical Geology (3)

**Total Units: 19-20**



**Geography 1****Physical Geography***3 units; 3 hours lecture**Recommended Preparation: 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 1A**Credit, degree applicable**Transfer CSU, UC*

This course surveys the geographic distribution and interrelationships of cultural elements such as population, agriculture, industry, cities, religion, language, customs, and territorial organization.

**Geography 5****World Regional Geography***3 units; 3 hours lecture**Recommended Preparation: eligibility for English 1A**Credit, degree applicable**Transfer CSU, UC*

This course surveys the major countries and regions of the world, examining their environments, people, cities, resources, history, economies, and special problems.

**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 1A**Credit, degree applicable**Transfer CSU, UC*

This course is a systematic study of California's unique and diverse physical environments and associated landforms, climates, and ecological communities. This course presents an overview of human settlement patterns, economic activities, and cultural aspects, with an emphasis on physical environment-human occupancy relationships.

**Geography 8****Introduction to Geographic Information Systems***4 units; 3 hours lecture, 3 hours lab**Recommended Preparation: Computer Information Systems 13 or basic computer skills**Credit, degree applicable**Transfer CSU, UC*

This computer-based course provides an introduction to the fundamentals of automated mapping and Geographic Information Systems (GIS) software. Laboratory work includes experience in the use of map scales, working with spatial data and metadata, creating data with Global Positioning Systems (GPS) and geocoding, map features, map overlays, creation of charts and graphs, basic spatial analysis techniques, and the presentation of data in map layouts.

**Geography 9****Weather and Climate***3 units; 3 hours lecture**Recommended Preparation: English 82**Credit, degree applicable**Transfer CSU, UC*

This course is a survey of the causes and regional distribution of the Earth's weather and climate. The content includes the atmosphere, cause of seasons, air temperature, air pressure and wind, clouds and precipitation, and storms. Use of weather instruments and weather data interpretation are also covered.

**Geography 20***(formerly Geography 20abcd)***Geography Field Studies***1 unit; 0.5 hour lecture, 1.5 hours lab to be arranged**Recommended Preparation: English A**Credit, degree applicable**Transfer CSU*

This course focuses on the physical, cultural, urban, and economic elements of geographic regions. Field study is usually conducted over a four day period.

*Note: Students pay fees for camping and meals.***Geography 99***(formerly 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\**

This course provides special advanced studies in a subject field of Geography not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Geography projects (54 hours per unit).

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

## GEOLOGY

### AS-T Degree

#### Natural Sciences Division

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

The geology program is designed to provide students the opportunity to obtain a transfer degree upon successful completion of the geology major requirements. The student will acquire the ability to apply the theory of plate tectonics, knowledge of geologic hazards, and principles of geologic time to natural phenomena. Laboratories complement the lecture material providing the student with a foundation in observational and interpretive techniques. Competencies are assessed by examining the student's ability to make careful observations of earth materials and processes, explain observations, predict future outcomes of earth processes, and successfully complete laboratory and field trip activities.

The Associate in Science for Transfer (AS-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AS-T are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AS-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AS-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AS-T.

Course	Title
GEOL 1	Physical Geology (3)
GEOL 2	History of Planet Earth (3)
GEOL 3	Physical Geology Laboratory (1)
GEOL 4	History of Planet Earth Laboratory (1)
CHEM 1A	General Chemistry I (5)
CHEM 1B	General Chemistry II (5)
MATH 190	Single Variable Calculus and Analytic Geometry I (5)
MATH 191	Single Variable Calculus and Analytic Geometry II (5)

**Total Units: 28**

### 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 geology, including the scientific method and the history of geology. It examines the materials, structures, and processes that compose and shape the earth. It includes a survey of minerals, rocks, and soils; a study of plate tectonics and the forces that create volcanoes, earthquakes, and mountains; and a study of surface features due to weathering and erosion, streams, mass wasting, ground water, glaciers, wind, desert processes, and ocean waves. The course examines concepts of geologic time, relative and absolute age dating, and fossils. The course also investigates renewable and non-renewable resources as well as mining provinces that produce metals important for industry and technology.

*Note: 1 unit of laboratory science credit will be granted with concurrent or subsequent enrollment in a geology laboratory course.*

### Geology 2

#### History of Planet Earth

3 units; 3 hours lecture

*Recommended Preparation: Geology 1 and eligibility for*

*English 1A*

*Credit, degree applicable*

*Transfer CSU, UC*

This course is a study of the history of the Earth since the time of its formation to the present day. It integrates plate tectonics into a detailed investigation of the dynamics of the Earth's geologic forces and their effect on the atmospheric, oceanic, and biologic realms. The effect of extraterrestrial events such as asteroid impacts that have shaped our habitable world are also covered.

*Note: 4 units of laboratory science credit will be granted with concurrent or subsequent enrollment in 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.

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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 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 minerals, igneous, metamorphic, and 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: eligibility for English 1A**Credit, degree applicable**Transfer CSU*

This course is a broad-based introductory study of earth science for future educators and will include teaching techniques to engage students in science. The topics covered are part of the California science standards and are designed to introduce geology, oceanography, meteorology, and solar system astronomy. It includes the study of earth materials, geologic history, ocean basins and coastlines, weather and climate, pollution and earth resources, planetary geology, and the scientific method. The laboratory component includes study of rocks, maps, scientific instruments, earthquakes, and local geologic features.

*Note: Geology 6 is not designed for geology or earth science majors.*

**Geology 15****Natural Disasters**

3 units; 3 hours lecture

*Recommended Preparation: English 82**Credit, degree applicable**Transfer CSU, UC*

This course presents a study of natural hazards such as earthquakes, volcanism, hurricanes, landslides and floods and how we can prepare for and possibly mitigate these phenomena in order to lessen their impact on society. In addition, this course will address global climate change and associated earth science processes, as well as the misuse and pollution of vital natural resources such as freshwater.

**Geology 30****Geology Laboratory of Death Valley**

1 unit; 3 hours lab per week 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 per week 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 per week 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 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 per week 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, structural and geomorphic features and mountain building processes along the central and southern California coast with special emphasis on the geologic history of the Salinian Block, the subsequent impact of the San Andreas Fault, and coastal erosional processes.

*Note: Credit may be earned in 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 99**

(formerly 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\*

This course provides special advanced studies in a subject field of Earth Sciences not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Earth Science projects (54 hours per unit).

\*Note: Transfer limitations apply.

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 1A

Credit, degree applicable

Transfer CSU, UC

This course introduces students to the development of skills for language acquisition in speaking, listening, reading, and writing linguistically appropriate German. Students are also introduced to the cultural background of the language, including relationships among cultural practices and perspectives and the general aspects of everyday life. Technological support includes videos, DVDs, audio CDs, and Internet access to publishers' websites for tutoring and other support.

Note: The course is comparable to two years of high school German.

**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. Technology is available to reinforce the language skills acquired in the classroom.

Note: The prerequisite for this course is comparable to two years of high school German.

**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.

**Course Title****Required Core: 12 units**

HIST 101	United States History to 1877 (3)
HIST 102	United States History from 1877 to the Present (3)
HIST 140	History of Early Civilizations (3)
HIST 141	History of Modern Civilizations (3)

**9 units from:**

ASTU 7	History of American Popular Culture (3)
HIST 105	Women and American History from the Colonial Era to 1877 (3)
HIST 106	Women and American History from 1877 to the Present (3)
HIST 108	United States History: The American Indian Experience (3)
HIST 110	The African American in the United States to 1877 (3)
HIST 111	The African American in the United States from 1877 to the Present (3)
HIST 112	History of the Chicano in the United States (3)
HIST 122	United States Social History: Cultural Pluralism in America (3)
HIST 128	History of California (3)
HIST 129	History of Los Angeles (3)
HIST 143	Twentieth Century World History (3)
HIST 145	History of World Religions (3)
HIST 152	History of Latin America Through Independence (3)
HIST 154	A History of Mexico (3)
HIST 162	History of Early Britain (3)
HIST 163	History of Modern Britain (3)
HIST 175	History of Asian Civilizations to 1600 (3)
HIST 176	History of Asian Civilizations from 1600 to the Present (3)
HIST 178	History of China (3)
HIST 183	Introduction to African History, Prehistory to 1885 (3)
HIST 184	Introduction to African History, 1885 to the Present (3)

**Total Units: 21**

**Preparation for the History Transfer Major**

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

**HISTORY****AA-T 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. The major prepares students for transfer to a CSU and training in areas such as education, research, archival science, and government.

The Associate in Arts for Transfer (AA-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AA-T are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AA-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AA-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AA-T.

**Course Title****Required Core: 6 units**

HIST 101	United States History to 1877 (3)
HIST 102	United States History from 1877 to the Present (3)

**List A: 6 units**

HIST 140	History of Early Civilizations (3)
HIST 141	History of Modern Civilizations (3)

**List B: one course from Area 1 and Area 2****3 units from Area 1**

ART 106	Cross-Cultural Art (3)
ART 205A	History of Asian Art – India and Southeast Asia (3)
ART 205B	History of Asian Art – China, Korea and Japan (3)
ART 207	Art History of Mexico and Central and South America (3)
ART 209	History of African Art (3)
CHIN 1	Elementary Chinese I (4)
CHIN 2	Elementary Chinese II (4)
CHIN 24	Introduction to Chinese Language and Culture (3)
ENGL 28	Images of Women in Literature (3)
ENGL 31	Mythology and Folklore (3)
ENGL 35	World Literature: 3500 BCE to 1650 CE (3)
ENGL 36	World Literature: 1650 CE to Present (3)
ENGL 42	Chicano and Latino Literature (3)
ENGL 43	African American Literature (3)
FREN 1	Elementary French I (4)
FREN 2	Elementary French II (4)
FREN 3	Intermediate French I (4)
FREN 4	Intermediate French II (4)
FREN 5	Advanced French I (3)
FREN 6	Advanced French II (3)
GERM 1	Elementary German I (4)
GERM 2	Elementary German II (4)
HIST 105	Women and American History from the Colonial Era to 1877 (3)
HIST 106	Women and American History from 1877 to the Present (3)
HIST 110	The African American in the United States to 1877 (3)
HIST 111	The African American in the United States from 1877 to the Present (3)
HIST 112	History of the Chicano in the United States (3)
HIST 122	United States Social History: Cultural Pluralism in America (3)
HIST 143	Twentieth Century World History (3)
HIST 145	History of World Religions (3)

HIST 152	History of Latin America Through Independence (3)	GEOG 2	Cultural Geography (3)
HIST 154	A History of Mexico (3)	GEOG 5	World Regional Geography (3)
HIST 175	History of Asian Civilizations to 1600 (3)	GEOG 7	Geography of California (3)
HIST 176	History of Asian Civilizations from 1600 to the Present (3)	HIST 105	Women and American History from the Colonial Era to 1877 (3)
HIST 178	History of China (3)	HIST 106	Women and American History from 1877 to the Present (3)
HIST 183	Introduction to African History, Prehistory to 1885 (3)	HIST 110	The African American in the United States to 1877 (3)
HIST 184	Introduction to African History, 1885 to the Present (3)	HIST 111	The African American in the United States from 1877 to the Present (3)
ITAL 1	Elementary Italian I (4)	HIST 112	History of the Chicano in the United States (3)
ITAL 2	Elementary Italian II (4)	HIST 122	United States Social History: Cultural Pluralism in America (3)
ITAL 24	Introduction to Italian Culture (3)	HIST 143	Twentieth Century World History (3)
JAPA 1	Elementary Japanese I (4)	HIST 145	History of World Religions (3)
JAPA 2	Elementary Japanese II (4)	HIST 152	History of Latin America Through Independence (3)
JAPA 3	Intermediate Japanese I (4)	HIST 154	A History of Mexico (3)
JAPA 4	Intermediate Japanese II (4)	HIST 175	History of Asian Civilizations to 1600 (3)
JAPA 25	Cultural Aspects of the Japanese Language (3)	HIST 176	History of Asian Civilizations from 1600 to the Present (3)
PHIL 114	Asian Philosophy (3)	HIST 178	History of China (3)
SLAN 111	American Sign Language I (4)	HIST 183	Introduction to African History, Prehistory to 1885 (3)
SLAN 112	American Sign Language II (4)	HIST 184	Introduction to African History, 1885 to the Present (3)
SLAN 113	American Sign Language III (4)	JOUR 12	Mass Media and Society (3)
SLAN 114	American Sign Language IV (4)	POLI 1	Governments of the United States and California (3)
SLAN 130	Deaf Culture (3)	POLI 2	Introduction to Comparative Politics (3)
SPAN 1	Elementary Spanish I (4)	POLI 3	Introduction to Principles and Methods of Political Science (3)
SPAN 2	Elementary Spanish II (4)	POLI 5	Ethnicity in the American Political Process (3)
SPAN 3	Intermediate Spanish I (4)	POLI 6	Civil Rights and Liberties in the United States (3)
SPAN 4	Intermediate Spanish II (4)	POLI 7	Political Philosophy (3)
SPAN 5	Advanced Spanish I (3)	POLI 10	Introduction to International Relations (3)
SPAN 6	Advanced Spanish II (3)	PSYC 2	Psychology for Effective Living (3)
SPAN 52A	Spanish for Native Speakers I (4)	PSYC 5	General Psychology (3)
SPAN 52B	Spanish for Native Speakers II (4)	PSYC 10	African American Psychology (3)
<b>3 units from Area 2</b>		PE 275	Sport Psychology (3)
ASTU 7	History of American Popular Culture (3)	SLAN 130	Deaf Culture (3)
ANTH 2	Introduction to Cultural Anthropology (3)	SOCI 101	Introduction to Sociology (3)
ANTH 3	Introduction to Archaeology (3)	SOCI 102	The Family (3)
ANTH 4	Language and Culture (3)	SOCI 104	Social Problems (3)
ANTH 6	Native Peoples of North America (3)	SOCI 107	Issues of Race and Ethnicity in the United States (3)
ANTH 7	Native Peoples of South America (3)	SOCI 108	Global Perspectives on Race and Ethnicity (3)
ANTH 8	Ancient Civilizations of Mesoamerica (3)	SOCI 112	Introduction to Criminology (3)
ANTH 9	Women, Culture, and Society (3)	WSTU 1	Introduction to Women's Studies (3)
ANTH 11	Anthropology of Religion, Magic and Witchcraft (3)	<b>Total Units: 18</b>	
ANTH 12	Ancient Civilizations of the Old World (3)		
COMS 260	Introduction to Intercultural Communication (3)		
COMS 265	Mass Communication (3)		
ECON 5	Fundamentals of Economics (3)		
ECON 1	Principles of Economics: Macroeconomics (3)		
ECON 2	Principles of Economics: Microeconomics Theory (3)		
ESTU 1	Introduction to Ethnic Studies (3)		

**History 101*****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*****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*****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 to 1877 with special emphasis on the contributions of women to colonial society and the nation. The impact of social, political, economic and cultural forces on women's lives will also be examined.

*\*Note: The maximum UC credit allowed for students completing History 105 and 106 and History 101 and 102 and/or History 110 and 111 is one series.*

**History 106*****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 contributions of women to the evolving modern nation. The impact of social, political, economic and cultural forces on women's lives will also be examined.

*\*Note: The maximum UC credit allowed for students completing History 105 and 106 and History 101 and 102 and/or History 110 and 111 is one series.*

**History 108*****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 early American Indian societies, the impact of European contact, trade, and colonization as well as the impact of United States political, economic, and social policies on Native Americans. Emphasis is placed on the attempts of American Indians to protect their sovereignty and revitalize their societies.

*Note: This course meets the criteria of the CSU graduation requirement for United States History, Constitution, and American Ideals.*

**History 110*****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*****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*****History of the Chicano in the United States****3 units; 3 hours lecture**Recommended Preparation: eligibility for English 1A  
Credit, degree applicable**Transfer CSU, UC*

This course surveys United States history from the Chicano perspective and covers historical periods from the initial contact between European and indigenous North American societies through colonial, early national, and contemporary American historical periods. Emphasis is placed on this group's contributions to the development of the United States. Factors that have shaped the formation of Mexican American society within the context of United States history will also be analyzed.

**History 122*****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*****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*****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 Americans to the present. Topics include environmental issues, urban development, race and ethnicity, the entertainment industry, and the media's portrayal of Los Angeles. Special emphasis is given to the expanding role of Los Angeles as a global city that is a destination for diverse immigrant populations and a center of international commerce.

**History 140*****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*****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*****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*****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 surveys the political, economic, social and cultural development of Latin America from the pre-European contact to the achievement of independence in the early 19th century. Topics include the Native American world before European conquest, consequences of contact between Native Americans, Europeans and Africans, the formation of the colonial order, and the move toward independence from Spanish and Portuguese colonial rule.

**History 154***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***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***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 175***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***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 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***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***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.

## Horticulture

### See Environmental Horticulture for A.S. Degree and Certificate Requirements

#### Horticulture 41

##### *General Horticulture*

3 units; 3 hours lecture

*Recommended Preparation: English 82*

*Credit, degree applicable*

*Transfer CSU*

This course will provide a foundation for the care and culture of plants with an emphasis on landscape and nursery management. Topics include biomes, plant groups, soil preparation and plant selection, turf grass selection, installation and care, landscape design, nursery management, plant propagation, integrated pest management, and basic botany and physiology. Career opportunities in horticulture will also be discussed.

#### Horticulture 42

##### *Plant Propagation*

3 units; 2 hours lecture, 3 hours lab

*Recommended Preparation: English 82*

*Credit, degree applicable*

*Transfer CSU*

Plant reproduction techniques will be studied and practiced with an emphasis on asexual (vegetative) propagation methods such as grafting, budding, layering, cuttings, and tissue culture. Sexual propagation (flower/seed), preparation and use of growing mediums, and operations of greenhouse and shade house structures will also be covered.

#### Horticulture 44

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

3 units; 2 hours lecture, 3 hours lab per week to be arranged

*Recommended Preparation: English 82*

*Credit, degree applicable*

*Transfer CSU*

In this course, students will develop an awareness and appreciation of edible, medicinal and poisonous plants and their effect on humans over the centuries. Students will survey ornamental and native plant communities with emphasis on flowering plants, ecology, economic uses, and identification. Students will perform lab work primarily in the field. Field lab sites will be in the chaparral, forest, and desert.

#### Horticulture 46

##### *Pest Control*

3 units; 3 hours lecture

*Recommended Preparation: English 82 and Mathematics 40*

*Credit, degree applicable*

*Transfer CSU*

This course emphasizes the concepts of landscape and pest management. Identification and control of potential pests and diseases, and their habits, hosts, and seasonal history will be studied. Chemical, biological and integrated pest management, as well as the laws and regulations affecting pest control, will be discussed.

#### Horticulture 53

##### *Soils and Fertilizers*

3 units; 2 hours lecture, 3 hours lab

*Recommended Preparation: English 82 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: English 82 and Horticulture 55 or Horticulture 56*

*Credit, degree applicable*

*Transfer CSU*

This course introduces the principles of landscape design and basic drafting techniques to guide the student through the process of creating formal drawings for residences. Selection and placement of plant materials according to texture, color, mass, and cultural requirements for the intended landscape use will be explored.

#### Horticulture 55

##### *Plant Identification – Trees*

3 units; 3 hours lecture

*Recommended Preparation: 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: 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: Mathematics 12**Credit, degree applicable**Transfer CSU*

This course introduces the basics of residential and small commercial landscape irrigation and determining the water demand and the water availability of a landscape site. Selection of sprinklers, proper sizing of pipe, and selection of irrigation controllers as well as typical irrigation materials and assembly techniques will be explored. Low volume irrigation systems will also be discussed.

**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\**

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: Transfer limitations apply.**Note: The total units earned for Cooperative Work Experience Education may not exceed 16 units.***Horticulture 99***(formerly 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\**

This course provides special advanced studies in a subject field of Horticulture not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Environmental Horticulture projects (54 hours per unit).

*\*Note: Transfer limitations apply.**Note: For eligibility requirements, go to [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)***Human Development****Human Development 101***(formerly Human Development 8)***Orientation to College and Educational Planning***1 unit; 1 hour lecture*

*Recommended Preparation: English 84 or English as a Second Language 52B and English A or English as a Second Language 53C*

*Credit, degree applicable**Transfer CSU*

This course provides students with the information, skills, and resources necessary for successful educational experiences. Students will become aware of their responsibilities as students in a diverse college setting, develop an understanding of their individual learning styles, create realistic and obtainable educational and career goals, develop skills in managing time to achieve goals, and learn how to create a support network using college resources and services.

**Human Development 105***(formerly Human Development 5)***Career and Life Planning***1 unit; 1 hour lecture*

*Recommended Preparation: English 84 or English as a Second Language 52B and English A or English as a Second Language 53C*

*Credit, degree applicable**Transfer CSU*

This course provides an introduction to career and life planning, including an exploration of core values, skills, personality traits, life stages and experiences. Students will develop a career and life plan by applying career planning techniques and decision-making strategies. Emphasis will be placed on awareness of psychological, sociological, and physiological factors related to career and life satisfaction.

**Human Development 107***(formerly Human Development 20)***Navigating the Transfer Process***1 unit; 1 hour lecture*

*Recommended Preparation: English 84 or English as a Second Language 52B and English A or English as a Second Language 53C*

*Credit, degree applicable**Transfer CSU*

This course introduces students to the process of transferring to a university. Students will be provided with information necessary to evaluate educational and career goals, compare universities, and review university admissions and major preparation requirements. Emphasis will be placed on the development of educational plans, financial aid opportunities, and available programs and services at universities.

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

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**Human Development 110**

(formerly Human Development 10)

***Strategies for Creating Success in College and in Life***

3 units; 3 hours lecture

*Recommended Preparation: English 84 or English as a Second Language 52B and English A or English as a Second Language 53C**Credit, degree applicable**Transfer CSU, UC*

This course provides an exploration of cognitive, psychological, social and physical factors influencing success in college and in life. Topics include personal responsibility, critical thinking, motivation, self-efficacy, self-awareness, lifelong learning, self-management, health and wellness, interpersonal communication in a diverse world, and educational planning.

**Human Development 115*****Career Development Across the Lifespan***

3 units; 3 hours lecture

*Recommended Preparation: English 84 or English as a Second Language 52B and English A or English as a Second Language 53C**Credit, degree applicable**Transfer CSU*

This course offers a comprehensive approach to career development across the lifespan. Theories of career and life development provide a framework for understanding vocational choice, work satisfaction, and career transition. Psychological and sociological factors influencing education, career and personal decision-making, career assessment tools for identifying college majors and careers, as well as the knowledge, skills and personal qualities necessary for success in a diverse workplace will be discussed. The course also reviews changing global environments, labor market trends, career research, and job search strategies.

**Humanities****Humanities 1*****An Introduction to the Humanities***

3 units; 3 hours lecture

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

This course is an introduction to the humanities through an historical, descriptive, interpretive, and critical study of film, drama, music, literature, painting, sculpture, and architecture.

**Industrial Arts****See Machine Tool Technology****Italian****Italian 1*****Elementary Italian I***

4 units; 5 hours lecture

*Recommended Preparation: eligibility for English 1A**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 21**

(formerly Italian 21ab)

***Beginning Conversational Italian***

2 units; 2 hours lecture

*Prerequisite: Italian 1 with a minimum grade of C or equivalent**Credit, degree applicable*

This course is designed to help students develop competency in Italian oral expression, oral comprehension, pronunciation, and conversational strategies.

**Italian 22**

(formerly Italian 22ab)

**Intermediate Conversational Italian**

2 units; 2 hours lecture

*Prerequisite: Italian 2 and Italian 21 with a minimum grade of C in prerequisite or equivalent**Credit, degree applicable**Transfer CSU, UC*

This course is designed for the intermediate student to develop Italian language fluency in oral expression, increase oral comprehension, and improve pronunciation. Conversational topics are based upon the daily experiences and cultural life of the 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.

At least 50 percent of the courses required for the Japanese major must be completed at El Camino College. Japanese 4 must be completed at El Camino College.

**Course Title****Required Core: 4 units**

JAPA 4 Intermediate Japanese II (4)

**4-11 units from:**

JAPA 1 Elementary Japanese I (4)

JAPA 2 Elementary Japanese II (4)

JAPA 3 Intermediate Japanese I (4)

JAPA 21 Beginning Conversational Japanese (2)

JAPA 22 Intermediate Conversational Japanese (2)

**a minimum of 3 units from:**

ANTH 2 Introduction to Cultural Anthropology (3)

ART 205B History of Asian Art – China, Korea and Japan (3)

ENGL 35 World Literature: 3500 BCE to 1650 CE (3)

ENGL 36 World Literature: 1650 CE to Present (3)

HIST 175 History of Asian Civilizations to 1600 (3)

HIST 176 History of Asian Civilizations from 1600 to the Present (3)

JAPA 25 Cultural Aspects of the Japanese Language (3)

PHIL 107 Philosophy of Religion (3)

POLI 2 Introduction to Comparative Politics (3)

POLI 10 Introduction to International Relations (3)

**Total Units: 18****Preparation for the Japanese Transfer Major**

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

**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.

*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.

*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 21**

(formerly 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 22**

(formerly Japanese 22ab)

**Intermediate Conversational Japanese**

2 units; 2 hours lecture

*Prerequisite: Japanese 2 and Japanese 21 with a minimum grade of C in prerequisite or equivalent**Credit, degree applicable**Transfer CSU, UC*

This course is designed for the intermediate student to develop Japanese language fluency in oral expression, increase oral comprehension, and improve pronunciation. Conversational topics are based upon the daily experiences and cultural life of native Japanese speakers.

**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 99**

(formerly Japanese 99abc)

**Independent Study**

1-3 units; hours to be arranged

*Enrollment Limitation: two courses in Japanese with a minimum grade of B in each and acknowledgment by the instructor with whom the student will work**Credit, degree applicable**Transfer CSU\**

This course provides special advanced studies in a subject field of Japanese education not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Japanese projects (54 hours per unit).

*\*Note: Transfer limitations apply.*

*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)

The journalism program prepares the student to acquire proficiency in traditional and electronic news gathering techniques and in analyzing and evaluating information. The student will be able to write a variety of publishable stories for electronic and print journalism and to apply principles of editing and publication design. Competencies will be assessed regularly by performance in the college newspaper's print and web editions and its magazine, as well as by participation in state and national competitions. The major prepares the student to transfer and major in journalism, mass communications, public relations or advertising and provides career opportunities in electronic journalism and in newspaper, magazine, advertising, public relations, and radio/television work.

At least 15 units required for the major must be completed at El Camino College.

Course	Title
<b>Required Core: 21 units</b>	
JOUR 1	News Writing and Reporting (3)
JOUR 8	Advanced Reporting and News Editing (3)
JOUR 6	Basic Photojournalism (3)
or	
PHOT 106	Basic Photojournalism (3)
JOUR 9abcd*	Magazine Editing and Production (3)
JOUR 11abcd*	Newspaper Publication (3)
JOUR 12	Mass Media and Society (3)
JOUR 14abcd*	Multimedia Journalism (3)
<b>2-3 units from:</b>	
JOUR 7ab*	Advanced Photojournalism (2)
or	
PHOT 206ab*	Advanced Photojournalism (2)
ECON 1	Principles of Economics: Macroeconomics (3)
POLI 5	Ethnicity in the American Political Process (3)
<b>Total Units: 23-24</b>	

\*Note: one semester each of JOUR 7ab, JOUR 9abcd, JOUR 11abcd, JOUR 14abcd, and PHOT 206ab may be counted for the major.

Note: JOUR 6 is the same course as PHOT 106. Course credit is limited to JOUR 6 or PHOT 106.

### Preparation for the Journalism Transfer Major

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

### Certificate of Achievement

A Certificate of Achievement will be granted upon completion of all program requirements. At least 15 units of the certificate requirements must be completed at El Camino College.

### Journalism Certificate of Achievement

Course	Title
JOUR 1	News Writing and Reporting (3)
JOUR 8	Advanced Reporting and News Editing (3)
JOUR 6	Basic Photojournalism (3)
or	
PHOT 106	Basic Photojournalism (3)
JOUR 9abcd*	Magazine Editing and Production (3)
JOUR 11abcd*	Newspaper Publication (3)
JOUR 12	Mass Media and Society (3)
JOUR 14abcd*	Multimedia Journalism (3)
<b>Total Units: 21</b>	

\*Note: one semester each of JOUR 9abcd, JOUR 11abcd, and JOUR 14abcd may be counted for the certificate. Note: JOUR 6 is the same course as PHOT 106. Course credit is limited to JOUR 6 or PHOT 106.

For Gainful Employment program information, please visit [www.elcamino.edu/academics/humanities/journalism](http://www.elcamino.edu/academics/humanities/journalism)

## JOURNALISM

### AA-T Degree

#### Humanities Division

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

The journalism program prepares the student to acquire proficiency in traditional and online news gathering techniques and in analyzing and evaluating information. The student will be able to write a variety of publishable stories for online and print journalism and to apply principles of editing and publication design. Competencies will be assessed regularly by performance in the college newspaper's print and online editions and its magazine, as well as by their participation in state and national competitions. The major prepares the student to transfer to a CSU and major in journalism, mass communications, public relations or advertising as well as provide career opportunities in digital and print journalism, newspaper, magazine, advertising, public relations, and radio/television work.

The Associate in Arts for Transfer (AA-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AA-T are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AA-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AA-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AA-T.

### Course Title

#### Required Core: 9 units

JOUR 1	News Writing and Reporting (3)
JOUR 12	Mass Media and Society (3)
JOUR 9abcd*	Magazine Editing and Production (3)
or	
JOUR 11abcd*	Newspaper Publication (3)
<b>List A: 3 units</b>	
JOUR 8	Advanced Reporting and News Editing (3)
JOUR 14abcd*	Multimedia Journalism (3)
JOUR 6	Basic Photojournalism (3)
or	
PHOT 106	Basic Photojournalism (3)
JOUR 9abcd*	Magazine Editing and Production (3)
or	
JOUR 11abcd*	Newspaper Publication (3)
<b>List B: 6-7 units</b>	
COMS 120	Argumentation and Debate (3)
ECON 1	Principles of Economics: Macroeconomics (3)
or	
ECON 2	Principles of Economics: Microeconomics Theory (3)
ENGL 1C	Critical Thinking and Composition (3)
JOUR 6	Basic Photojournalism (3)
or	
PHOT 106	Basic Photojournalism (3)
JOUR 11abcd*	Newspaper Publication (3)
JOUR 14abcd*	Multimedia Journalism (3)
MATH 150	Elementary Statistics with Probability (4)
or	
PSYC 9A	Introduction to Elementary Statistical Methods for the Study of Behavior (4)
or	
SOCI 109	Introduction to Elementary Statistical Methods for the Study of Behavior (4)
PHIL 106	Introduction to Symbolic Logic (3)
POLI 1	Governments of the United States and California (3)
POLI 2	Introduction to Comparative Politics (3)
	<b>Total Units: 18-19</b>

\*Note: one semester each of JOUR 9abcd, JOUR 11abcd and JOUR 14abcd may be counted for the major. Note: JOUR 6 is the same course as PHOT 106. Course credit is limited to JOUR 6 or PHOT 106.

**Journalism 1****News Writing and Reporting***3 units; 3 hours lecture**Prerequisite: eligibility for English 1A**Credit, degree applicable**Transfer CSU, UC*

This course provides instruction in writing and reporting for the news media, from print to online journalism. Students will gain experience in learning the proper format and Associated Press style for writing news, features, and sports stories. Emphasis is placed on gathering information, covering the community, and understanding media ethics and laws.

**Journalism 6****Basic Photojournalism***3 units; 2 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: Journalism 6 is the same course as Photography 106.***Journalism 7ab****Advanced Photojournalism***2 units; 1 hour lecture, 3 hours lab**Prerequisite: Journalism 6 or Photography 106 with a minimum grade of C in prerequisite or equivalent**Credit, degree applicable**Transfer CSU*

This course provides instruction and laboratory experience in the taking and processing of photographs for publication in the college newspaper, newspaper website and news magazine. Students also receive experience in news, feature and sports photo editing, photo essay page design and layout, as well as digital photography and photo scanning techniques using Photoshop. All students enrolled in this course produce content for scholastic competition on the regional, state and national level.

*Note: Journalism 7ab is the same course as Photography 206ab.*


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

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**Journalism 8***(formerly 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 explanatory and investigative journalism, and opinion writing, and will incorporate the study of editing principles, style, and design to conform with professional models. Problems of law and libel will be discussed. Students will also be given hands-on instruction in newspaper and web design, including graphics and multimedia. Leadership training, social media skills, and discussion of the business of journalism will also be provided.

**Journalism 9abcd****Magazine Editing and Production***3 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 covers all aspects of magazine production with an emphasis on writing and editing in-depth magazine feature stories, selecting photographs and art, designing pages, creating a production schedule, managing an editorial staff, overseeing advertising and producing a print and digital magazine for publication. Subsequent semesters of the course will strengthen writing, editing, and design skills by increasing the variety and sophistication of production experiences. Throughout this course, all students are trained and prepared to compete in a variety of journalism competitions.

**Journalism 11abcd****Newspaper Publication***3 units; 2 hours lecture, 3 hours lab to be arranged**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. All students enrolled in this course produce content for scholastic competition on the regional, state, and national level.

**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 Internet. With a focus on critical thinking skills, students gain experience in reading and writing persuasive and argumentative essays about problems facing the mass media. Students also learn the history of the eight mass media as well as analyze and evaluate the functions, the responsibilities, the regulations, and the ethics involved in the mass media industry.

*\*Note: The maximum UC credit allowed for students completing Journalism 12 and Communication Studies 265 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 using digital cameras, digital recorders, digital camcorders and computer software. Throughout this course, all students are trained and prepared to compete in a variety of journalism competitions.

**Journalism 95***(formerly 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\**

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Journalism field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

*\*Note: Transfer limitations apply.*

*Note: The total units earned for Cooperative Work Experience Education may not exceed 16 units.*

**Journalism 99***(formerly 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\**

This course provides special advanced studies in a subject field of Journalism not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Journalism projects (54 hours per unit).

*\*Note: Transfer limitations apply.*

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

**Law****See Paralegal Studies for A.A. Degree and Certificate Requirements****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****Business Law***3 units; 3 hours lecture**Recommended Preparation: eligibility for English 1A**Credit, degree applicable**Transfer CSU\**

This course explores the fundamental legal principles pertaining to business transactions with an introduction to the legal process. Topics include sources of law and ethics, contracts, torts, agency, criminal law, negotiable instruments, business organizations, and judicial and administrative processes.

*\*Note: There may be CSU course limitations for students completing*

*Law 5 and Law 4. Check with the transfer school for transfer status of this course.*

**Law 11****Introduction to Legal Research***3 units; 3 hours lecture**Prerequisite: eligibility for 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 legally recognized relationships. Emphasis will be placed on the dissolution of a marriage including the legal theories behind the dissolution and the public policy supporting those theories. The course includes requirements of a valid marriage, a Judgment of Nullity, legal separation, dissolution of marriage proceedings, Order to Show Cause, and preparation of proper forms. This course also covers the concepts of separate and community property and division upon dissolution. Other aspects of family law including children's rights, adoption and guardianship are discussed.

**Law 14****Tort Law***3 units; 3 hours lecture**Prerequisite: Law 11 with a minimum grade of C**Recommended Preparation: Law 4 or Law 5**Credit, degree applicable**Transfer CSU*

This course includes the study of intentional wrongs, inadvertent wrongs, and that type of conduct for which the law imposes absolute liability. Special emphasis is given to concepts of causation, standard of care, reasonable person, duty, and defenses to liability. Also covered are wrongs which produce intangible harm such as defamation, invasion of privacy, misrepresentation, and misuse of legal process.

**Law 15****Civil and Criminal Evidence***3 units; 3 hours lecture**Prerequisite: Law 11 with a minimum grade of C**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 only offered in the fall semester.*

**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****3 units; 2 hours lecture, 2 hours lab**Prerequisite: Law 11 with a minimum grade of C or concurrent enrollment**Credit, degree applicable**Transfer CSU*

This course is an introduction to the use of computers in the law office and the utilization of legal specific software for forms and document preparation. Emphasis is placed on how to automate document production and litigation support systems. Introduction to legal and general electronic information databases are covered. Current legal research software, such as Westlaw and Lexis, sources on the Internet, and time and billing software are also included in the course.

**Law 20*****Paralegal Seminar****3 units; 3 hours lecture**Prerequisite: Law 17 with a minimum grade of C or concurrent enrollment**Credit, degree applicable**Transfer CSU*

This course examines ethics, advanced paralegal communication skills, law office management, problem solving, and analysis skills. It also includes a component on employment, networking and job search.

*Note: This course is designed to be taken at the end of the paralegal student's course of study.*

**Law 95***(formerly 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\**

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Law field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

*\*Note: Transfer limitations apply.*

*Note: The total units earned for Cooperative Work Experience Education 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.

#### Transfer Degree Option:

Students must complete the requirements listed on the guide sheet for a transfer institution.

#### Teacher Preparation Option:

Course	Title
<b>Required Core: 16 units</b>	
ENGL 1A	Reading and Composition (4)
or	
ENGL 1AH	Honors Reading and Composition (4)
and	
COMS 100	Public Speaking (3)
or	
ENGL 1C	Critical Thinking and Composition (3)
or	
ENGL 1CH	Honors Critical Thinking and Composition (3)
and	
HIST 101	United States History to 1877 (3)
or	
HIST 102	United States History from 1877 to the Present (3)
POLI 1	Governments of the United States and California (3)
and	

GEOG 5	World Regional Geography (3)
or	
CDEV 103	Child Growth and Development (3)
or	
HIST 140	History of Early Civilizations (3)

#### 3-4 units from:

BIOL 10	Fundamentals of Biology (4)
or	
BIOL 10H	Honors Fundamentals of Biology (4)
GEOL 6	Earth Science in Education (4)
PSCI 25	Exploring Physical Sciences (3)

#### 3 units from:

ART 101	Art and Visual Culture : A Global Perspective (3)
DANC 101	Dance Appreciation (3)
ENGL 15A	Survey of British Literature I (3)
ENGL 15B	Survey of British Literature II (3)
ENGL 35	World Literature: 3500 BCE to 1650 CE (3)
ENGL 36	World Literature: 1650 CE to Present (3)
ENGL 40A	American Literature I (3)
ENGL 40B	American Literature II (3)
ENGL 42	Chicano and Latino Literature (3)
ENGL 43	African American Literature (3)
ENGL 44	The Literature of American Ethnic Groups (3)

MUSI 111	Music Appreciation Survey (3)
MUSI 112	Music Cultures of the World (3)
THEA 103	Theatre Appreciation (3)

#### 3-5 units from:

MATH 73	Intermediate Algebra for General Education (5)
MATH 80	Intermediate Algebra for Science, Technology, Engineering, and Mathematics (5)
MATH 110	Structures and Concepts in Mathematics (3)
MATH 111	Mathematics for Elementary School Teachers – Geometry, Probability and Statistics (3)
MATH 115	Probability and Statistics for Prospective Elementary School Teachers (3)
MATH 120	Nature of Mathematics (3)
MATH 130	College Algebra (3)
MATH 150	Elementary Statistics with Probability (4)
MATH 170	Trigonometry (3)

#### 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.

## ELEMENTARY TEACHER EDUCATION

### AA-T Degree

#### *Behavioral and Social Sciences Division*

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

The program is designed for students who wish to earn a multiple-subject teaching credential authorizing them to teach in grades K-5. Students will study a broad range of subjects to prepare them for teaching, including English, mathematics, science, social science, visual and performing arts, and human development. Upon successful completion of the program, students will be prepared to transfer to a CSU and major in Liberal Studies. Competencies will be assessed regularly through projects, examinations, laboratory experiments, and presentations.

The Associate in Arts for Transfer (AA-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AA-T are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AA-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AA-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AA-T.

### Course Title

#### *Required Core: 42 units*

BIOL 10	Fundamentals of Biology (4)
CDEV 103	Child Growth and Development (3)
COMS 100	Public Speaking (3)
EDUC 201	Foundations in Education (3)
ENGL 1A	Reading and Composition (4)
ENGL 1B	Literature and Composition (3)
GEOG 5	World Regional Geography (3)
GEOL 6	Earth Science in Education (4)
HIST 101	United States History to 1877 (3)
HIST 140	History of Early Civilizations (3)
MATH 110	Structures and Concepts in Mathematics (3)
POLI 1	Governments of the United States and California (3)
PSCI 25	Exploring Physical Sciences (3)

#### **List A: 3 units**

COMS 120	Argumentation and Debate (3)
ENGL 1C	Critical Thinking and Composition (3)
PHIL 105	Critical Thinking and Discourse (3)
PHIL 106	Introduction to Symbolic Logic (3)
PSYC 3	Critical Thinking and Psychology (3)

#### **List B: 3 units**

ART 101	Art and Visual Culture : A Global Perspective (3)
DANC 101	Dance Appreciation (3)
MUSI 111	Music Appreciation Survey (3)
THEA 103	Theatre Appreciation (3)

#### **Total Units: 48**



## 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

### Library Information Science 1

#### *Introduction to Library Information Science*

1 unit; 1 hour lecture

Recommended Preparation: English A

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

Recommended Preparation: English A

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 pass/no pass 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.

Complete the courses in one of the following options: Machinist or Numerical Control Programmer. At least 50 percent of the courses required for the major must be completed at El Camino College.

#### Machinist Option:

Course	Title
MTT 2	Manufacturing Print Reading (3)
MTT 10A	Introduction to CAD/CAM (3)
MTT 16	General Metals (3)
MTT 40	Machine Shop Calculations (3)
MTT 101	Introduction to Conventional and CNC Machining (4)
MTT 103	Conventional and CNC Turning (4)
MTT 105	Conventional and CNC Milling (4)
MTT 107	Advanced Manufacturing Processes (4)

**Total Units: 28**

**Numerical Control Programmer Option:**

Course	Title
MTT 2	Manufacturing Print Reading (3)
MTT 10A	Introduction to CAD/CAM (3)
MTT 10B	Computer Numerical Control Programming (3)
MTT 10J	Numerical Control Graphics Programming (3)
MTT 10K	3D Numerical Control Graphics Programming (3)
MTT 16	General Metals (3)
MTT 40	Machine Shop Calculations (3)
MTT 101	Introduction to Conventional and CNC Machining (4)
MTT 103	Conventional and CNC Turning (4)
MTT 105	Conventional and CNC Milling (4)

**Total Units: 33****Recommended Electives:**

CADD 5	Introduction to Mechanical Drafting (3)
CADD 7	Solid Modeling, Assemblies and Two Dimensional (2D) Drawings (3)
CADD 31	Orientation to CATIA (2)
CADD 45	Geometrical Dimensioning and Tolerancing (3)
MTT 95	Cooperative Work Experience Education (2-4)
MTT 99	Independent Study (1-3)
WELD 15	Basic Welding for Allied Fields (3)

**Certificates of Achievement**

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificates must be completed at El Camino College.

**CNC Machine Operator Certificate of Achievement**

Course	Title
MTT 101	Introduction to Conventional and CNC Machining (4)
MTT 103	Conventional and CNC Turning (4)
MTT 105	Conventional and CNC Milling (4)
MTT 107	Advanced Manufacturing Processes (4)

**Total Units: 16****Machinist Certificate of Achievement**

Course	Title
MTT 2	Manufacturing Print Reading (3)
MTT 10A	Introduction to CAD/CAM (3)
MTT 16	General Metals (3)
MTT 40	Machine Shop Calculations (3)
MTT 101	Introduction to Conventional and CNC Machining (4)
MTT 103	Conventional and CNC Turning (4)
MTT 105	Conventional and CNC Milling (4)
MTT 107	Advanced Manufacturing Processes (4)

**Total Units: 28****Numerical Control Programmer Certificate of Achievement**

Course	Title
MTT 2	Manufacturing Print Reading (3)
MTT 10A	Introduction to CAD/CAM (3)
MTT 10B	Computer Numerical Control Programming (3)
MTT 10J	Numerical Control Graphics Programming (3)
MTT 10K	3D Numerical Control Graphics Programming (3)
MTT 16	General Metals (3)
MTT 40	Machine Shop Calculations (3)
MTT 101	Introduction to Conventional and CNC Machining (4)
MTT 103	Conventional and CNC Turning (4)
MTT 105	Conventional and CNC Milling (4)

**Total Units: 33**

For Gainful Employment program information, please visit [www.elcamino.edu/academics/indtech/mtt](http://www.elcamino.edu/academics/indtech/mtt)

**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 standard and the construction 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 101 or equivalent with a minimum grade of C in prerequisite*

*Credit, degree applicable**Transfer CSU*

This course covers the study of Computer Numerical Control (CNC) programming with emphasis on contouring, canned cycles, cutter diameter compensation, looping, macro subroutines and multiple part programming for three axis milling machines and CNC lathes.

**Machine Tool Technology 10J****Numerical Control Graphics Programming***3 units; 2 hours lecture, 3 hours lab*

*Recommended Preparation: Machine Tool Technology 10A, 40, 101 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 16***(formerly 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 pass/no pass option.***Machine Tool Technology 40****Machine Shop Calculations***3 units; 3 hours lecture*

*Recommended Preparation: Machine Tool Technology 2 and Mathematics 23*

*Credit, degree applicable**Transfer CSU*

This course covers the study of machine shop problems involving the solution of formulas related to screw threads, feeds and speeds, spur gears, simple and angular indexing. Geometric figures, angles, triangles, circles, arcs, trigonometric functions, compound angles and oblique triangles will also be introduced.

**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 95**

(formerly 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\*

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Machine Tool Technology field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

\*Note: Transfer limitations apply.

Note: The total units earned for Cooperative Work Experience Education may not exceed 16 units.

**Machine Tool Technology 99**

(formerly 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 acknowledgment by the instructor with whom the student will work

Credit, degree applicable

Transfer CSU\*

This course provides special advanced studies in a subject field of Machine Tool Technology not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Machine Tool Technology projects (54 hours per unit).

\*Note: Transfer limitations apply.

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

**Machine Tool Technology 101**

(formerly Machine Tool Technology 101abcd)

**Introduction to Conventional and CNC Machining**

4 units; 2 hours lecture, 6 hours lab

Credit, degree applicable

Transfer CSU

In this course, students will be introduced to the principles and operation of conventional and Computer Numerically Controlled (CNC) machine tools with an emphasis on safety, measurement, hand tools, power saws, drilling machines, lathes, and milling and grinding machines focusing on practices and setups used in industry.

Note: Letter grade or pass/no pass option.

**Machine Tool Technology 103**

(formerly Machine Tool Technology 103abcd)

**Conventional and CNC Turning**

4 units; 2 hours lecture, 6 hours lab

Prerequisite: Machine Tool Technology 46 or 101 with a minimum grade of C in prerequisite or equivalent

Credit, degree applicable

Transfer CSU

In this course, students will study at an advanced level the principles and operation of conventional and Computer Numerically Controlled (CNC) machine tools with an emphasis on the set up and operation of lathes. Topics will include safety, turning, drilling, boring, threading, cutting tools, CNC programming practices, and setups as applied in industry.

Note: Letter grade or pass/no pass option.

**Machine Tool Technology 105**

(formerly Machine Tool Technology 105abcd)

**Conventional and CNC Milling**

4 units; 2 hours lecture, 6 hours lab

Prerequisite: Machine Tool Technology 46 or 101 with a minimum grade of C in prerequisite or equivalent

Credit, degree applicable

Transfer CSU

In this course, students will study at an advanced level the principles and operation of conventional and Computer Numerically Controlled (CNC) machine tools with an emphasis on the set up and operation of milling machines. Topics will include safety, drilling, milling, tapping, tooling, CNC programming practices, and setups as applied in industry.

Note: Letter grade or pass/no pass option.

**Machine Tool Technology 107**

(formerly Machine Tool Technology 107abcd)

**Advanced Manufacturing Processes**

4 units; 2 hours lecture, 6 hours lab

Prerequisite: Machine Tool Technology 46 or 101 with a minimum grade of C in prerequisite or equivalent

Credit, degree applicable

Transfer CSU

In this course, students will study the principles and operation of machine tools with an emphasis on advanced manufacturing processes and machines, such as Electrical Discharge Machines (EDM), water abrasive jet machines, and grinding machines. Additional topics will include abrasives, coordinate measuring machines, advanced precision measurement, Geometric Dimensioning and Tolerancing (GD&T), optical comparators, and practices and setups as applied in industry.

Note: Letter grade or pass/no pass option.

**Machine Tool Technology 201***Introduction to Aerospace Fastener Technology**4 units; 2 hours lecture, 6 hours lab**Recommended Preparation: Mathematics 12 and Machine Tool Technology 2 and 40**Credit, degree applicable**Transfer CSU*

In this course, students are introduced to fastener's standard measurement techniques, cold-heading (forging), thread-rolling, centerless grinding, turning, trimming, and interpretation of travelers (routers). Standard aerospace fastener industry practices, safety procedures, and set-ups are emphasized.

*Note: Letter grade or pass/no pass option.***Machine Tool Technology 203***Advanced Inspection of Fasteners and Measuring Instruments**3 units; 2 hours lecture, 4 hours lab**Prerequisite: Machine Tool Technology 2 or 40**Credit, degree applicable**Transfer CSU*

Students are introduced to advanced fastener inspection. Standard measurement techniques with focus on microscopes, thread pitch gauges, Go-No Go gauges, micrometers, indicators, calipers, gauge-blocks, plug gauges, comparator, and interpretation of travelers. Standard aerospace fastener industry practices are emphasized.

*Note: Letter grade or pass/no pass option.***MANUFACTURING TECHNOLOGY****A.S. Degree and Certificate of Achievement***Industry and Technology Division**www.elcamino.edu/academics/indtech*

The manufacturing technology program prepares students for employment in fields related to manufacturing. By completing the degree or certificate requirements, students acquire a foundation in computer aided design, machining, electronics, technical mathematics, and welding. Students also select a career field in which to specialize or broaden their knowledge. These fields include computer aided design/drafting, electronics, environmental technology, machine tool technology, quality assurance, or welding. Competencies will be assessed regularly by student performance in the classroom and laboratory.

<b>Course</b>	<b>Title</b>
<b>Required Core: 19 units</b>	
MTT 101	Introduction to Conventional and CNC Machining (4)
MTT 10A	Introduction to CAD/CAM (3)
or	
CADD 7	Solid Modeling, Assemblies and Two Dimensional (2D) Drawings (3)
MTT 2	Manufacturing Print Reading (3)
or	
CADD 5	Introduction to Mechanical Drafting (3)
MTT 40	Machine Shop Calculations (3)
ECHT 11	Introduction to Electronics (3)
WELD 15	Basic Welding for Allied Fields (3)
<b>a minimum of 18 units from:</b>	
CADD 28	Parametric Three Dimensional (3D) Modeling and Assemblies (2)
CADD 31	Orientation to CATIA (2)
CADD 32	Product Modeling with CATIA (2)
CADD 33	Analyses and Simulations with CATIA (2)
CADD 37	Advanced CATIA Functions (2)
CADD 45	Geometrical Dimensioning and Tolerancing (3)
ECHT 22	Basic Electronic Fabrication (3)
ECHT 110	Introduction to Direct and Alternating Current Circuits (3)
ECHT 120	Semiconductor Circuits I (3)
ECHT 122	Semiconductor Power Devices (3)
ECHT 124	Operational Amplifiers and Linear Integrated Circuits (3)
ECHT 130	Digital Systems and Computer Logic I (3)
ECHT 140	Computer Systems and Hardware Technologies I (4)
ECHT 142	Computer Systems and Hardware Technologies II (4)
ECHT 144	CompTIA A+ Certification Preparation for Computer Hardware Systems (4)
ECHT 191	Introduction to Microprocessors and Interfacing (3)

ETEC 10	Principles of Engineering Technology (3)
or	
ETEC 10A	Principles of Engineering Technology I (1.5)
and	
ETEC 10B	Principles of Engineering Technology II (1.5)
ETEC 12	Introduction to Engineering Design (3)
or	
ETEC 12A	Introduction to Engineering Design I (1.5)
and	
ETEC 12B	Introduction to Engineering Design II (1.5)
ETEC 14	Electronics for Engineering Technologists (3)
or	
ETEC 14A	Electronics for Engineering Technologists I (1.5)
and	
ETEC 14B	Electronics for Engineering Technologists II (1.5)
ETEC 16	Computer Integrated Manufacturing (3)
or	
ETEC 16A	Computer Integrated Manufacturing I (1.5)
and	
ETEC 16B	Computer Integrated Manufacturing II (1.5)
ETEC 18	Engineering Design and Development (3)
or	
ETEC 18A	Engineering Design and Development I (1.5)
and	
ETEC 18B	Engineering Design and Development II (1.5)
MTT 10B	Computer Numerical Control Programming (3)
MTT 10J	Numerical Control Graphics Programming (3)
MTT 10K	3D Numerical Control Graphics Programming (3)
MTT 103	Conventional and CNC Turning (4)
MTT 105	Conventional and CNC Milling (4)
MTT 107	Advanced Manufacturing Processes (4)
MTEC 70	Basic Robotics (2)
MTEC 75	Integrated Robotic and Automated Technologies (3)
or	
MTEC 75A	Integrated Robotic and Automated Technologies I (1.5)
and	
MTEC 75B	Integrated Robotic and Automated Technologies II (1.5)
WELD 1	Introduction to Welding Process (8)
WELD 5	Basic Welding Technology (8)
WELD 23	Advanced Arc Welding Specialty Lab (2)
WELD 40A	Introduction to Gas Tungsten Arc Welding (GTAW) (3)
WELD 45	Structural Fabrication (5)

**a maximum of 4 units from:**

CADD 95	Cooperative Work Experience Education (2-4)
ECHT 95	Cooperative Work Experience Education (2-4)
MTT 95	Cooperative Work Experience Education (2-4)
WELD 95	Cooperative Work Experience Education (2-4)

**Total Units: 37****Certificate of Achievement**

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

**Manufacturing Technology Certificate of Achievement****Course Title****Required Core: 19 units**

MTT 101	Introduction to Conventional and CNC Machining (4)
MTT 10A	Introduction to CAD/CAM (3)
or	
CADD 7	Solid Modeling, Assemblies and Two Dimensional (2D) Drawings (3)
MTT 2	Manufacturing Print Reading (3)
or	
CADD 5	Introduction to Mechanical Drafting (3)
MTT 40	Machine Shop Calculations (3)
ECHT 11	Introduction to Electronics (3)
WELD 15	Basic Welding for Allied Fields (3)

**a minimum of 18 units from:**

CADD 28	Parametric Three Dimensional (3D) Modeling and Assemblies (2)
CADD 31	Orientation to CATIA (2)
CADD 32	Product Modeling with CATIA (2)
CADD 33	Analyses and Simulations with CATIA (2)
CADD 37	Advanced CATIA Functions (2)
CADD 45	Geometrical Dimensioning and Tolerancing (3)
ECHT 22	Basic Electronic Fabrication (3)
ECHT 110	Introduction to Direct and Alternating Current Circuits (3)
ECHT 120	Semiconductor Circuits I (3)
ECHT 122	Semiconductor Power Devices (3)
ECHT 124	Operational Amplifiers and Linear Integrated Circuits (3)
ECHT 130	Digital Systems and Computer Logic I (3)
ECHT 140	Computer Systems and Hardware Technologies I (4)
ECHT 142	Computer Systems and Hardware Technologies II (4)
ECHT 144	CompTIA A+ Certification Preparation for Computer Hardware Systems (4)

ECHE 191	Introduction to Microprocessors and Interfacing (3)
ETEC 10 or EETC 10A and EETC 10B	Principles of Engineering Technology (3) Principles of Engineering Technology I (1.5) Principles of Engineering Technology II (1.5)
EETC 12 or EETC 12A and EETC 12B EETC 14	Introduction to Engineering Design (3) Introduction to Engineering Design I (1.5) Introduction to Engineering Design II (1.5) Electronics for Engineering Technologists (3)
or EETC 14A	Electronics for Engineering Technologists I (1.5)
and EETC 14B	Electronics for Engineering Technologists II (1.5)
EETC 16 or EETC 16A and EETC 16B	Computer Integrated Manufacturing (3) Computer Integrated Manufacturing I (1.5) Computer Integrated Manufacturing II (1.5)
EETC 18 or EETC 18A	Engineering Design and Development (3) Engineering Design and Development I (1.5)
and EETC 18B	Engineering Design and Development II (1.5)
MTT 10B	Computer Numerical Control Programming (3)
MTT 10J	Numerical Control Graphics Programming (3)
MTT 10K	3D Numerical Control Graphics Programming (3)
MTT 103	Conventional and CNC Turning (4)
MTT 105	Conventional and CNC Milling (4)
MTT 107	Advanced Manufacturing Processes (4)
MTEC 70	Basic Robotics (2)
MTEC 75 or MTEC 75A	Integrated Robotic and Automated Technologies (3) Integrated Robotic and Automated Technologies I (1.5)
and MTEC 75B	Integrated Robotic and Automated Technologies II (1.5)
WELD 1	Introduction to Welding Process (8)
WELD 5	Basic Welding Technology (8)
WELD 23	Advanced Arc Welding Specialty Lab (2)
WELD 40A	Introduction to Gas Tungsten Arc Welding (GTAW) (3)
WELD 45	Structural Fabrication (5)

**a maximum of 4 units from:**

CADD 95	Cooperative Work Experience Education (2-4)
ECHT 95	Cooperative Work Experience Education (2-4)
MTT 95	Cooperative Work Experience Education (2-4)
WELD 95	Cooperative Work Experience Education (2-4)

**Total Units: 37**

For Gainful Employment program information, please visit [www.elcamino.edu/academics/indtech/manufacturingtech](http://www.elcamino.edu/academics/indtech/manufacturingtech)

**Manufacturing Technology 70****Basic Robotics**

2 units; 1 hour lecture, 3 hours lab

Credit, degree applicable

Transfer CSU

Students will explore the technologies used to fabricate model robotics systems. Additional topics covered include basic electronics theory, electro-mechanical assembly, motors and micro-controller operation, basic programming, and careers in technology. Students will construct and test prototype robots. Project building and problem solving will be emphasized.

**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.

Note: This course is the same as the two-course sequence Manufacturing Technology 75A and 75B.

**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, electromechanical fabrication, motors, and drive trains. Students will construct, program, and test a vehicular or process robot.

Note: The two-course sequence Manufacturing Technology 75A and 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, and Manufacturing Technology 75A**Credit, degree applicable**Transfer CSU*

This is the second course in a two-course sequence that covers robotic and automation applications with emphasis on imbedded electronics, microcontroller programming, sensors, manufacturing materials and processes. Students will construct, program, and test a vehicular or process robot to satisfy instructor assigned goals or tasks.

*Note: The two-course sequence Manufacturing Technology 75A and 75B is the same as Manufacturing Technology 75.*

**Manufacturing Technology 99**

(formerly 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\**

This course provides special advanced studies in a subject field of Manufacturing Technology not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Manufacturing Technology projects (54 hours per unit).

*\*Note: Transfer limitations apply.*

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



**Marketing**  
See Business

# El Camino College

## Pre-Transfer Mathematics

### Traditional Sequence

Math 12 is open to all students placing below the Pre-Algebra level.

**Math 12** **Basic Arithmetic**  
3 units, 4 hrs lecture

Students who pass **Math 12** may enroll in Math 23.

**Math 23** **Pre-Algebra**  
3 units, 4 hrs lecture

Students who pass **Math 23** may enroll in Math 40.  
Under special circumstances, a student passing **Math 37** may enroll in Math 40.

### Accelerated Sequence

Math 37 is open to all students placing at or below the Elementary Algebra level. Students who pass **Math 12** or **Math 23** may enroll in Math 37.

**Math 37** **Basic Accelerated Mathematics (BAM)**  
5 units,  
4.5 hrs lecture, 3.5 hrs lab

**Math 40** **Elementary Algebra**  
4 units, 4 hrs lecture  
or  
**Math 33 & Math 43** **Extended Elementary Algebra (Parts I and II)**  
2 semesters, 3 units, 4 hrs lecture each (available only at the Compton Center)

Students who pass Math 23, Math 37 or Math 40 may enroll in Math 67. Math 60 is NOT required for Math 67.

Students who pass Math 37, Math 40 or Math 43 may enroll in Math 60.

Students who pass Math 40 or Math 43 may enroll in Math 80 or Math 73.  
Students who pass Levels A, B and C of Math 37 may qualify for Math 80 or Math 73.  
Math 60 is NOT required for Math 80 or Math 73.

**Math 67** **General Education Algebra (GEA)**  
4 units,  
3 hrs lecture, 3 hrs lab

**Math 60** **Geometry**  
4 units,  
4 hrs lecture

**Math 80 Intermediate Algebra for Science, Technology, Engineering, Mathematics (or Business)**  
5 units, 5 hrs lecture

**Math 73 Intermediate Algebra for General Education**  
5 units, 5 hrs lecture

### Transfer-Level Mathematics

Math 80 serves as a prerequisite for all transfer-level mathematics courses. Students of science, computer science, engineering, mathematics and business should take Math 80.

Math 67 or Math 73 may be used as the prerequisite for Math 110, 111, 115, 120, 140 and 150. Science, computer science, engineering, mathematics and business should not take Math 67 or Math 73.

Math 67 is not appropriate for nursing students planning to take Chem 1A.

Some transfer-level courses also require Math 60, which can be waived with evidence of successful completion of High School Geometry.

Math 80 and Math 73 satisfy the associate degree mathematics requirement. Students passing Math 67 need to take a transfer-level mathematics course in order to satisfy the associate degree mathematics requirement.

## 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. One course in Differential Equations with Linear Algebra is required, as well as one additional course to provide the student with greater breadth in mathematics. Competency will be assessed by evaluating the student's ability to solve a wide range of calculus and other mathematical problems.

At least 8 units for this degree must be completed at El Camino College.

#### Course Title

##### **Required Core: 20 units**

MATH 190	Single Variable Calculus and Analytic Geometry I (5)
MATH 191	Single Variable Calculus and Analytic Geometry II (5)
MATH 220	Multi-Variable Calculus (5)
MATH 270	Differential Equations with Linear Algebra (5)

##### **4-5 units from:**

CSCI 1	Problem Solving and Program Design Using C++ (4)
CSCI 2	Introduction to Data Structures (5)
CSCI 3	Computer Programming in Java (4)
MATH 150	Elementary Statistics with Probability (4)
MATH 210	Introduction to Discrete Structures (4)
PHYS 1A	Mechanics of Solids (4)
PHYS 3A	General Physics with Calculus (5)

**Total Units: 24-25**

### **Preparation for the Mathematics Transfer Major**

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

## MATHEMATICS

### AS-T Degree

*Mathematical Sciences Division*

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

The mathematics program provides the student with sufficient depth to support a lifelong interest in mathematics, and is suitable for the student who plans to transfer in mathematics. The core of the major is the calculus sequence, in which the student will acquire a conceptual understanding of the principles of differential and integral calculus for functions of one and several variables, as well as the ability to apply calculus techniques in a variety of applications. One course in Differential Equations with Linear Algebra is required, as well as one additional course to provide the student with greater breadth in mathematics. Competency will be assessed by evaluating the student's ability to solve a wide range of calculus and other mathematical problems.

The Associate in Science for Transfer (AS-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AS-T degree are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AS-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AS-T degree will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AS-T degree.

**Course Title****Required Core: 15 units**

MATH 190 Single Variable Calculus and Analytic Geometry I (5)

MATH 191 Single Variable Calculus and Analytic Geometry II (5)

MATH 220 Multi-Variable Calculus (5)

**List A: 5 units**

MATH 270 Differential Equations with Linear Algebra (5)

**List B: 4-5 units**

CSCI 1 Problem Solving and Program Design Using C++ (4)

CSCI 2 Introduction to Data Structures (5)

CSCI 3 Computer Programming in Java (4)

MATH 150 Elementary Statistics with Probability (4)

MATH 210 Introduction to Discrete Structures (4)

PHYS 1A Mechanics of Solids (4)

PHYS 3A General Physics with Calculus (5)

**Total Units: 24-25****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.*

**Mathematics 17A****Math Academy: Arithmetic**

0 units; 7 hours lecture, 1 hour lab (6 week course)

*Prerequisite: qualification by testing (El Camino College Mathematics Placement Test) and assessment**Recommended Preparation: Human Development 101 or concurrent enrollment**Noncredit*

This course is designed to develop student's number and operation sense working with whole numbers, fractions, decimals, and percents, as well as develop problem-solving skills. Topics include operations on whole numbers and decimals, estimations, ratios, proportions, applications, an introduction to variables, algebraic equations, and signed numbers.

*Note: This course is designed for students who placed into Mathematics 12. This course is repeatable and open for enrollment at registration and at any time during the semester.*

**Mathematics 23****Pre-Algebra**

3 units; 4 hours lecture

*Prerequisite: Mathematics 12 with a minimum grade of C 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 27A****Math Academy: Pre-Algebra**

0 units; 7 hours lecture, 1 hour lab (6 week course)

*Prerequisite: Mathematics 12 with a minimum grade of C or qualification by testing (El Camino College Mathematics Placement Test) and assessment**Recommended Preparation: Human Development 101 or concurrent enrollment**Noncredit*

This course bridges the gap between arithmetic and formal algebra, developing number sense and operation sense, in order to formulate and solve algebraic equations with integers, fractions, and percent. Algebraic principles are applied to problems from a variety of fields. Other topics include proportional reasoning, spatial reasoning, informal geometry and measurement, coordinate graphing, and informational graphs.

*Note: This course is designed for students who passed Mathematics 12 or who placed into Mathematics 23. This course is repeatable and open for enrollment at registration and at any time during the semester.*

**Mathematics 33****Extended Elementary Algebra, Part I**

3 units; 4 hours lecture

*Prerequisite: Mathematics 23 with a minimum grade of C 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.

**Mathematics 37****Basic Accelerated Mathematics**

5 units; 4.5 hours lecture, 3.5 hours lab

Credit, degree applicable

This accelerated course provides students who place below the elementary algebra level the opportunity to develop numeracy skills, strengthen mathematical reasoning skills, and complete elementary algebra in a single semester. There are three levels of mathematics in this course, taught in an integrated fashion: basic arithmetic skills; fundamentals of algebra, with an emphasis on linear equations; and the remaining topics found in a typical elementary algebra course. This course has multiple exit levels, based on a student's demonstrated competencies. Students engage in student success activities, including creating an education plan with a counselor, and participation in supplemental instruction.

*Note: This course is not recommended for students who place at or above the elementary algebra level.*

*Note: Pass/no pass only.*

**Mathematics 40****Elementary Algebra**

4 units; 4 hours lecture

*Prerequisite: Mathematics 23 with a minimum grade of C 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****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 47A****Math Academy: Elementary Algebra**

0 units; 7 hours lecture, 1 hour lab (6 week course)

*Prerequisite: Mathematics 23 with a minimum grade of C or qualification by testing (El Camino College Mathematics Placement Test) and assessment*

*Recommended Preparation: Human Development 101 or concurrent enrollment*

*Noncredit*

This elementary algebra course is the study of real number solutions and applications of linear equations, quadratic equations, linear inequalities, and systems of linear equations. Other topics include coordinate graphing or linear equations, factoring techniques, and simplification of rational and radical expressions.

*Note: This course is designed for students who passed Mathematics 23 or who placed into Mathematics 40. This course is repeatable and open for enrollment at registration and at any time during the semester.*

**Mathematics 60****Elementary Geometry**

4 units; 4 hours lecture

*Prerequisite: Mathematics 40 or Mathematics 43 with a minimum grade of C in prerequisite or credit in Mathematics 37 or qualification by testing (El Camino College Mathematics Placement Test) and assessment*

*Credit, degree applicable*

This is an introductory course in geometry. Topics include: properties of geometric figures including circles, triangles and other polygons, congruence and similarity, and elementary logical reasoning. Formal proof is introduced and used throughout the course.

*Note: This course is equivalent to one year of high school geometry.*

**Mathematics 67****General Education Algebra**

4 units; 3 hours lecture, 3 hours lab

*Prerequisite: Mathematics 23 with a minimum grade of C or Mathematics 37 with a grade of P or qualification by testing (El Camino College Mathematics Placement Test) and assessment*

*Credit, degree applicable*

Using data and real-world applications, students in this accelerated course reinforce their numeracy skills and learn algebra and other quantitative reasoning skills needed for transfer-level general education mathematics courses.

*Note: Mathematics 67 is intended for students who place at the elementary algebra level. Mathematics 67 is a prerequisite course only for Mathematics 110, 111, 115, 120, 140, and 150. Mathematics, computer science, science, engineering, and business students should not take Mathematics 67. These students should be directed to Mathematics 80.*

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

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**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 further study in the sciences, technology, engineering, or mathematics. In the context of studying basic functions and their graphs, students strengthen and expand their algebra skills. Functions studied include linear, quadratic, polynomial, rational, and radical functions, as well as the absolute value function. Particular emphasis is placed on the operations on functions, solving equations and inequalities, as well as using functions to model real life situations. Other topics include solving systems of equations and applications.

Note: Mathematics 73 serves as a prerequisite course for all transfer-level mathematics course sequences, except the STEM and Business calculus sequences (Mathematics 130, 160, 165, 170, 180, 190, 191, and 220).

**Mathematics 80****Intermediate Algebra for Science, Technology, Engineering, and Mathematics**

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 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 170, 180, 190, 191, and 220).

**Mathematics 99**

(formerly 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 acknowledgment by the instructor with whom the student will work.

Credit, degree applicable

Transfer CSU\*

This course provides special advanced studies in a subject field of Mathematics not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Mathematics research projects (54 hours per unit).

\*Note: Transfer limitations apply.

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; 4 hours lab per week to be arranged

Enrollment Limitation: referral by instructor or counselor based on assessed academic need

Noncredit

This course provides students with supervised tutoring related to their assignments in all mathematics courses offered at El Camino College. The tutoring addresses the application of learning skills, the use of learning resources, and the review of course content.

Note: This course is repeatable and open for enrollment at registration and at any time during the semester.

**Mathematics 110****Structures and Concepts in Mathematics**

3 units; 2 hours lecture, 2 hours lab

Prerequisite: Mathematics 67 or 73 or 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 an emphasis on algebraic, geometric and kinesthetic modeling, inductive and deductive logic, and proofs using pictures. Designed for pre-service elementary school teachers, this course is appropriate for all students interested in a deeper understanding of the structure of mathematics.

\*Note: The maximum UC credit allowed for students completing 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 67 or 73 or 80 with a minimum grade of C in prerequisite or equivalent

Credit, degree applicable

Transfer CSU, UC\*

This course, designed for preservice elementary school teachers, will examine four content areas: Geometry (plane, solid, and coordinate geometry, congruence, similarity and tessellations); Measurement and Estimation (length, area, and volume); Statistics (graphs, measures of central tendency); and Probability (single and multistaged events, odds and expected values, and normal distributions).

\*Note: The maximum UC credit allowed for students completing Mathematics 110, 111, 115, and 116 is one course.

**Mathematics 115*****Probability and Statistics for  
Prospective Elementary School Teachers****3 units; 2 hours lecture, 2 hours lab**Prerequisite: Mathematics 67 or 73 or 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\**

This course is designed for students who plan to become elementary school teachers and will emphasize group and hands-on activities, the use of computer software, and graphing calculators in the exploration of statistics and probability. Topics include creating and interpreting graphs, random variables and sampling, measures of central tendency and dispersion, analysis of experiments including hypothesis testing, design of experiments, and data gathering. In addition, basic laws of probability, logic and set theory including dependent, independent, and mutually exclusive events, odds, and expected values will be explored.

*\*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****3 units; 2 hours lecture, 2 hours lab**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 67 or 73 or 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 geometry.

*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 80 with a minimum grade of C or qualification by testing (El Camino College Mathematics Placement Test) and assessment**Credit, degree applicable**Transfer CSU UC\**

In this course, students will explore polynomial, radical, rational, exponential, and logarithmic functions and their graphs, as well as sequences and series.

*\*Note: The maximum UC credit allowed for students completing Mathematics 130 and Mathematics 180 is one course.*

*Note: This is a preparatory course for Calculus I for the Biological, Management, and Social Sciences (Mathematics 160).*

**Mathematics 140*****Finite Mathematics for Business and Social Sciences****4 units; 4 hours lecture**Prerequisite: Mathematics 67 or 73 or 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 67 or 73 or 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

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 165****Calculus for Business and Social Sciences**

5 units; 5 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

Credit, degree applicable

Transfer CSU, UC

This course consists of an introduction to differential and integral calculus with business and social science applications to include polynomial, rational, exponential and logarithmic functions and their graphs; multi-variable calculus to include partial differentiation, optimization, and introduction to differential equations.

**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, identities, equations, complex numbers, graphs, 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 Analytic 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, continuity, derivatives and antiderivatives of algebraic and transcendental functions; definite integrals of algebraic and transcendental functions with and without the fundamental theorem of calculus; linear approximations; relating features of a function's graph to its derivatives; and application problems using derivatives as well as implicit differentiation. Problem solving using computer software is also addressed.

\*Note: The maximum UC credit allowed for students completing Mathematics 160 and 161 and Mathematics 190 and 191 is one course.

**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 a study of methods of integration, applications of integration, improper integrals, numerical integration, infinite sequences, series and power series, parametric equations, and polar coordinates.

\*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 is a study of calculus in several variables, including partial differentiation, tangent planes to surfaces, directional derivatives, and optimization problems. Topics include integral calculus in several variables including line, surface, and volume integrals, and the theorems of Green, Gauss (Divergence) and Stokes as generalizations of the Fundamental Theorem of Calculus; and topics in vector algebra and solid analytic geometry.

**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, and 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**Transfer CSU*

This course provides study and practical application of a medical vocabulary system according to body systems. Students review the basic construction of medical words, concentrating on word origins, root words, prefixes, and suffixes. Word structure, recognition, analysis, definition, spelling, and pronunciation are presented in the context of medical terms for organs, diseases, symptoms, diagnostic tests, and medical surgical procedures.

**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 1A or 20 or 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 and Certificate of Achievement

#### Fine Arts Division

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

The music program provides students with a comprehensive foundation in music theory, history, and performance. This is achieved through a structured program of training in a variety of solo performance media, ensembles, music theory, keyboard skills, music history, and music technology. The program prepares students for transfer and further study of music education, music business, audio for film/video production, songwriting, and music production. Students will demonstrate proficiency by analyzing, writing, interpreting, and performing pieces of music, and by demonstrating skills utilizing professional music software. Program assessment is measured by juried and public performances, program completion, transferability, student learning outcomes, and periodic program review.

#### Course Title

##### Required Core: 20 units

MUSI 103A	Theory and Musicianship I (4)
MUSI 103B	Theory and Musicianship II (4)
MUSI 131A	Beginning Piano I (2)
MUSI 190abcd*	Applied Music/Individual Lessons (1)
MUSI 215A	Music History and Literature up to 1750 (3)
MUSI 215B	Music History and Literature – 1750 to Present (3)

Each music student is required to choose an area to fulfill 30 units of the degree.

#### Vocal: select 10 units

##### 6 units from:

MUSI 102A	Beginning Sightsinging (2)
MUSI 120	Voice Class I (2)
MUSI 220	Voice Class II (2)

##### 4 units from:

MUSI 102B	Advanced Sightsinging (2)
MUSI 221	Introduction to Lyric Diction for Singers (2)
MUSI 222abcd	Opera Workshop (2)

#### Keyboard: select 10 units

MUSI 131B	Beginning Piano II (2)
MUSI 203	Theory and Musicianship III (4)
MUSI 231A	Intermediate Piano I (2)
MUSI 231B	Intermediate Piano II (2)
MUSI 232	Advanced Piano (2)

#### Instrumental Music: select 10 units

##### 4 units from:

MUSI 203	Theory and Musicianship III (4)
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##### 4 units from:

MUSI 260abcd**	Woodwind Ensembles (1)
MUSI 261abcd**	Brass Ensembles (1)
MUSI 262abcd**	Percussion Ensembles (1)

##### 2 units from:

MUSI 102A	Beginning Sightsinging (2)
or	
MUSI 102B	Advanced Sightsinging (2)
MUSI 143	Beginning Woodwind Instruments (2)
MUSI 144	Beginning Brass Instruments (2)
MUSI 145	Beginning Percussion Instruments (2)
MUSI 146	Beginning String Instruments (2)
MUSI 147A	Beginning Guitar (2)
MUSI 147B	Beginning Guitar II (2)
MUSI 247	Intermediate Guitar (2)

#### Commercial Music: select 10 units

##### 5 units from:

MUSI 105	Commercial/Jazz Theory and Musicianship (3)
MUSI 130	Beginning Jazz Improvisation (2)

##### 2 units from:

MUSI 147A	Beginning Guitar (2)
MUSI 147B	Beginning Guitar II (2)
MUSI 247	Intermediate Guitar (2)

##### 3 units from:

MUSI 113	Survey of Jazz (3)
MUSI 116	History of Rock Music (3)
MUSI 117	Music of the Beatles (3)

#### General Music: select 10 units

##### 4 units from:

MUSI 120	Voice Class I (2)
MUSI 147A	Beginning Guitar (2)
MUSI 147B	Beginning Guitar II (2)

##### 6 units from:

MUSI 102A	Beginning Sightsinging (2)
or	
MUSI 102B	Advanced Sightsinging (2)
MUSI 112	Music Cultures of the World (3)
MUSI 116	History of Rock Music (3)
MUSI 117	Music of the Beatles (3)
MUSI 203	Theory and Musicianship III (4)

#### Total Units: 30

\*Note: four semesters of Music 190abcd is required.

\*\*Note: one semester each of MUSI 260abcd, MUSI 261abcd, and MUSI 262abcd may be counted for credit toward the major.

As part of the requirements for Music 190abcd students will be required to enroll in a large ensemble course each semester to be chosen from the following list:

Music 151abcd Mixed Chorus (1 unit)  
 Music 152abcd Concert Choir (1 unit)  
 Music 253abcd Chorale (2 units)  
 Music 265abcd Symphonic Band (1 unit)  
 Music 266abcd Studio Jazz Band (1 unit)  
 Music 267abcd Concert Jazz Band (1 unit)  
 Music 268abcd Symphony Orchestra (1 unit)

### Preparation for the Music Transfer Major

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

### Certificate of Achievement

A Certificate of Achievement will be granted upon completion of all program requirements. Music 182, Music 284 and Music 285 must be completed at El Camino College.

### Commercial Music Certificate of Achievement

Course	Title
MUSI 101	Music Fundamentals (3)
MUSI 180	Fundamentals of Electronic Music (2)
MUSI 181A	Introduction to Electronic Music Studio (2)
MUSI 181B	Electronic Music Studio (2)
MUSI 182	Digital Audio Recording for Commercial Music (3)
MUSI 183	Keyboarding for Commercial Music (2)
MUSI 284	Commercial Music Business Studies (3)
MUSI 285	Songwriting for Commercial Music (3)
<b>Total Units: 20</b>	

### 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\**

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Music field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

*\*Note: Transfer limitations apply.*

*Note: The total units earned for Cooperative Work Experience Education may not exceed 16 units.*

### Music 99

(formerly 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\**

This course provides special advanced studies in a subject field of Music not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Music projects (54 hours per unit).

*\*Note: Transfer limitations apply.*

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

### Music 101

(formerly 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, modes and non-harmonic tones. Included are terms and symbols for tempi, dynamics, and repeats. The history and social context of the above concepts will be discussed.

### Music 102A

(formerly Music 2A)

#### Beginning Sightsinging

2 units; 2 hours lecture

*Credit, degree applicable*

*Transfer CSU, UC*

This course develops fundamental skills for reading and singing music at sight. This includes pitch and rhythm notation, key signatures, intervals, major and minor modes, and melodies. Class assignments will incorporate exercises in sightsinging, including melodic and rhythmic dictation.

### Music 102B

(formerly Music 2B)

#### Advanced Sightsinging

2 units; 2 hours lecture

*Prerequisite: Music 101 or 102A or 131A with a minimum grade of C in prerequisite or equivalent*

*Credit, degree applicable*

*Transfer CSU, UC*

This course continues the development of essential skills for reading and singing music at sight, including ear training and singing of major and minor mode-scales, intervals, chords, rhythms and melodies of increasing difficulty. Class assignments will incorporate exercises in melodic, rhythmic and harmonic sightsinging and dictation.

**Music 103A**

(formerly Music 3A)

***Theory and Musicianship I***

4 units; 5 hours lecture

*Prerequisite: Music 101 with a minimum grade of C or equivalent**Recommended Preparation: Music 102A and Music 131A or equivalent and English 84 or English as a Second Language 52B**Credit, degree applicable**Transfer CSU, UC*

In this course designed for the music major, students acquire knowledge of tonal harmony and develop corresponding aural skills. Four-part voice leading principles, harmonic progression, Roman numeral analysis, musical form, and non-chord tones are emphasized. Appropriate exercises in sight-singing and dictation will accompany written work.

**Music 103B**

(formerly Music 3B)

***Theory and Musicianship II***

4 units; 5 hours lecture

*Prerequisite: Music 103A with a minimum grade of C or equivalent**Recommended Preparation: Music 102A or 102B; Music 131B or equivalent**Credit, degree applicable**Transfer CSU, UC*

This course is a continuation of Music 103A and expands the study of tonal music by enlarging the harmonic vocabulary to include diatonic seventh chords and secondary functions. Modulation types common to music of the 18th century and small forms will also be discussed. Appropriate exercises in sight-singing and dictation will accompany written work.

**Music 105**

(formerly Music 5)

***Commercial/Jazz Theory and Musicianship***

3 units; 3 hours lecture

*Prerequisite: Music 101 with a minimum grade of C or equivalent**Recommended Preparation: Music 103A or equivalent**Credit, degree applicable**Transfer CSU, UC*

In this course, students acquire knowledge of tonal harmony used in commercial music and jazz. Emphasis is placed on harmonic, rhythmic and melodic vocabularies; chord-scale relationships, and basic keyboard applications. Students develop skills in ear training, writing transcriptions of recorded performances, composition, and music manuscript preparation.

**Music 111**

(formerly 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 112**

(formerly 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 113**

(formerly 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 116**

(formerly 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.

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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 117**

(formerly 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 120**

(formerly 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 130**

(formerly 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 an instrument or vocally)**Recommended Preparation: Music 101 or equivalent**Credit, degree applicable**Transfer CSU, UC*

This course is a study of the basic techniques of jazz improvisation. Emphasis is placed on the study and application of scales, chords, patterns, and "licks" used by musicians to create improvisations on tonal, modal, and blues-based songs. Except for keyboards and drums, students must provide their own instruments for classroom performances.

**Music 131A**

(formerly 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 131B**

(formerly Music 31B)

**Beginning Piano II**

2 units; 2 hours lecture, 1 hour lab

*Prerequisite: Music 131A with a minimum grade of C or equivalent**Credit, degree applicable**Transfer CSU, UC*

This course is a continuation of Music 131A (Beginning Piano I) using increasingly complex materials. Students will attend selected musical events at the El Camino College Center for the Arts.

**Music 143**

(formerly 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 144**

(formerly 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 145**

(formerly 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 146**

(formerly 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 147A**

(formerly Music 47ab)

**Beginning Guitar**

2 units; 2 hours lecture, 1 hour lab

Credit, degree applicable

Transfer CSU, UC

This course will focus on fundamental aspects of holding, tuning, and basic performance techniques for pickstyle guitar. Students will be introduced to the fundamentals of music including reading notation and basic music theory. Students will examine melodies, strumming patterns, and chord playing through the use of both traditional and contemporary popular music repertoire.

**Music 147B****Beginning Guitar II**

2 units; 2 hours lecture, 1 hour lab

Prerequisite: Music 147A with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC

This course is a continuation of Beginning Guitar I. Course content includes extended chord vocabulary, continuation of music notation reading, and study of popular music repertoire.

**Music 151abcd**

(formerly Music 51abcd)

**Mixed Chorus**

1 unit; 4 hours lab per week to be arranged

Transfer CSU, UC

In this course, the basic principles of choral technique are introduced through the performance of literature from a variety of style periods. Some of the styles include Renaissance, Baroque, Classical, Romantic, Gospel and Jazz. Student performances are held on and off campus each semester.

**Music 152abcd**

(formerly Music 52abcd)

**Concert Choir**

1 unit; 4 hours lab per week to be arranged

Credit, degree applicable

Transfer CSU, UC

This is a non-audition ensemble designed for the study and performance of choral works of various styles. Emphasis is placed on development of the voice in relationship to choral singing and the continuous growth of musicianship appropriate to choral literature. The ensemble will perform in concert at the conclusion of each semester.

Note: Letter grade or pass/no pass option.

**Music 180**

(formerly 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, multimedia technology, and performance skills utilizing digital synthesizers in conjunction with computers and music software applications.

**Music 181A**

(formerly 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 181B**

(formerly Music 81B)

**Electronic Music Studio**

2 units; 1 hour lecture, 2 hours lab

Prerequisite: Music 181A with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

This course is a continuation of Music 181A. It further explores the use of audio recording processes, synthesizers, computer hardware and software, and recording equipment.

**Music 182**

(formerly Music 82abc)

**Digital Audio Recording for Commercial Music**

3 units; 2 hours lecture, 3 hours lab

Prerequisite: Music 181A with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course provides instruction on the functions and operations of digital music audio recording software such as Pro Tools. Emphasis is placed on recording, editing, and mixing digital audio in both Macintosh and PC computer environments.

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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 183**

(formerly Music 83abcd)

**Keyboarding for Commercial Music**

2 units; 1 hour lecture, 3 hours lab

Recommended Preparation: Music 101

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 190abcd**

(formerly Music 23abcd)

**Applied Music/Individual Lessons**

1 unit; 4 hours lab per week to be arranged

Corequisite: large ensemble course at El Camino College:

Music 151abcd or 152abcd or 253abcd or 265abcd or

266abcd or 267abcd or 268abcd

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 for the music major is a recital workshop designed to develop individual performance skills. Instruction includes an individual weekly lesson. The student is required to practice on-campus, to enroll and participate in a large performing ensemble at El Camino College, and to attend selected musical events offered by the El Camino College Center for the Arts and in the community.

**Music 203**

(formerly Music 3C)

**Theory and Musicianship III**

4 units; 5 hours lecture

Prerequisite: Music 103B with a minimum grade of C or equivalent

Recommended Preparation: Music 215A or 215B

Credit, degree applicable

Transfer CSU, UC

This course is a continuation of Music 103B and expands the study of tonal music by enlarging the harmonic vocabulary to include the remaining chords. Small form will be reviewed as a precursor to sonata form, and students will study enharmonic modulation, modes, instrumental transposition, and orchestral score reading. Appropriate exercises in sightsinging and dictation will accompany written work.

**Music 215A**

(formerly 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 215B**

(formerly 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 220**

(formerly Music 19abcd)

**Voice Class II**

2 units; 2 hours lecture, 1 hour lab

Prerequisite: Music 120 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course continues the development of vocal technique, musicianship, style and interpretation, with increased emphasis on repertoire development. Attendance at selected musical events offered by the El Camino College Center for the Arts is required.

**Music 221****Introduction to Lyric Diction for Singers**

2 units; 2 hours lecture, 2 hours lab

Prerequisite: Music 120 with a minimum grade of C

Credit, degree applicable

Transfer CSU, UC

This course is designed for the study of diction and vocal production techniques as they apply specifically to the singer. Italian, Spanish, French, and German will be studied using phonetic diction, in preparation for the accurate vocal performance of these languages.

**Music 222abcd**

(formerly Music 222)

**Opera Workshop**

2 units; 1 hour lecture, 3 hours lab

Enrollment Limitation: audition

Prepare and perform a solo selection from memory and demonstrate the ability to read music at a beginning level.

Credit, degree applicable

Transfer CSU

This course develops vocal, musical, and dramatic skills through the research, rehearsal, and performance of selected works and scenes from the standard operatic literature.

*Note: This course is repeatable.*

**Music 231A**

(formerly Music 31C)

**Intermediate Piano I**

2 units; 2 hours lecture, 1 hour lab

Prerequisite: Music 131B with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC

This course continues the development of musical, technical and functional skills using selected intermediate repertoire representative of the stylistic periods. Attendance at specified musical events at the El Camino College Center for the Arts is required.

**Music 231B**

(formerly Music 31D)

**Intermediate Piano II**

2 units; 2 hours lecture, 1 hour lab

Prerequisite: Music 231A with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC

This course continues the development of musical, technical and functional skills using selected intermediate and intermediate/advanced repertoire representative of the style periods, the Baroque, Classic, Romantic and Contemporary. Attendance at specified musical events at the El Camino College Center for the Arts and in the community is required.

**Music 232**

(formerly Music 32abcd)

**Advanced Piano**

2 units; 2 hours lecture, 1 hour lab

Prerequisite: Music 231B with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC

This course continues the development of musical, technical and functional skills using selected advanced repertoire representative of the style periods, the Baroque, Classic, Romantic, and Contemporary. Attendance at specified musical events at El Camino College Center for the Arts is required.

**Music 247**

(formerly Music 48abcd)

**Intermediate Guitar**

2 units; 2 hours lecture, 1 hour lab

Prerequisite: Music 147A with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU, UC

This course is designed to explore guitar playing with a more focused approach. This course aims to provide the student with enough tools to continue study at a more stylistically-focused level upon completion. Students will be introduced to more advanced melody reading, moveable chord and scale types, advanced rhythm and strumming patterns, songwriting techniques, and improvisation.

**Music 253abcd**

(formerly 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 pass/no pass option.*

**Music 257abcd**

(formerly Music 57abcd)

**Women's Chorus**

1 unit; 4 hours lab per week to be arranged

Enrollment Limitation: audition

Credit, degree applicable

Transfer CSU, UC

This course provides an opportunity to participate in a women's choral ensemble. Choral literature of all styles composed or arranged for women's voices will be performed. Singers in this ensemble will perform at the conclusion of each semester.

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

**Music 259abcd**

(formerly Music 20abcd)

**Music Production Workshop**

1 unit; 3 hours lab per week to be arranged

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 provides experience in a musical theatre production as a member of the chorus or as a soloist. Students will participate in the Kennedy Center American College Theater Festival (KCACTF) competition.

**Music 260abcd**

(formerly 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 pass/no pass option.*

**Music 261abcd**

(formerly 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 pass/no pass option.*

**Music 262abcd**

(formerly 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 pass/no pass 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 264abcd**

(formerly 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*

These ensembles rehearse and perform literature written for combinations of string instruments. The ensembles include trios, quartets, quintets, and larger ensembles, and may be combined with non-string instruments to complete the instrumentation appropriate to the selected literature. Performances are held on campus and in the community.

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

**Music 265abcd**

(formerly Music 64abcd)

**Symphonic Band**

1 unit; 4 hours lab per week to be arranged

*Enrollment Limitation: some high school band or orchestra experience or ability to perform music of moderate difficulty on standard band instrument*

*Credit, degree applicable*

*Transfer CSU, UC*

This ensemble studies and performs compositions of moderate difficulty from the standard wind band repertoire. Emphasis is placed on stylistic and historical performance practices, playing techniques, and musicianship. Concerts are performed on and off campus.

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

**Music 266abcd**

(formerly Music 67abcd)

**Studio Jazz Band**

1 unit; 4 hours lab per week to be arranged

*Enrollment Limitation: audition*

*Credit, degree applicable*

*Transfer CSU, UC*

This intermediate ensemble rehearses and performs commercial big band music from the swing era. The literature includes works by composers such as Ellington, Basie, and Kenton, as well as opportunities for vocal jazz soloists. Emphasis is placed on section development, extended solos, and improvisation. Performances are held on campus and in the community.

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

**Music 267abcd**

(formerly Music 68abcd)

**Concert Jazz Band**

1 unit; 4 hours lab per week to be arranged

*Enrollment Limitation: audition*

*Credit, degree applicable*

*Transfer CSU, UC*

This advanced ensemble rehearses and performs a variety of music from the swing era to contemporary jazz written for the large standard jazz band instrumentation. Emphasis is placed on section development, improvisation, extended solos, and literature that is original and of increasing difficulty. Performances include campus concerts, as well as at local schools and in jazz festivals.

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

**Music 268abcd**

(formerly Music 70abcd)

**Symphony Orchestra***1 unit; 4 hours lab per week to be arranged**Enrollment Limitation: audition at the first class meeting (ability to perform music of moderate difficulty on a standard orchestral instrument)**Credit, degree applicable**Transfer CSU, UC*

This ensemble rehearses and performs classics from the standard symphony orchestra repertoire. Emphasis is placed on stylistic and historical performance practices, playing techniques, and musicianship. Literature includes works for string and full orchestras, as well as solo and choral accompanying. Concerts are performed on and off campus.

*Note: Letter grade or pass/no pass option.***Music 284**

(formerly 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 285**

(formerly Music 85ab)

**Songwriting for Commercial Music***3 units; 2 hours lecture, 3 hours lab**Recommended Preparation: Music 101**Credit, degree applicable**Transfer CSU*

In this course, students will develop and improve their ability to write songs, lyrics, and melodies through analysis and application of techniques used by professional songwriters. Students will be introduced to contemporary music technology and an overview of the music business as they pertain to songwriting.

**Music 290**

(formerly Music 90abcd)

**Intermediate Applied Music/Individual Lessons***1 unit; 4 hours lab per week to be arranged**Prerequisite: four semesters of Music 190abcd with a minimum grade of C**Corequisite: Large ensemble course at El Camino College: Music 151abcd or 152abcd or 253abcd or 265abcd or 266abcd or 267abcd or 268abcd**Credit, degree applicable**Transfer CSU, UC*

This course for the continuing, advanced applied music student is a recital workshop to enhance audition skills and build repertoire. Instruction includes an individual weekly lesson. The student is required to practice on-campus, to enroll and participate in a large performing ensemble 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 555****Community Choir for the Older Adult***0 units; 4 hours lab per week to be arranged (maximum of 72 hours per semester)**Noncredit*

This ensemble for the older adult rehearses and performs traditional and contemporary compositions from the standard choral literature. Emphasis is placed on stylistic and historical performance practices, choral techniques, and musicianship. Performances are combined with the College Community Choir and are held on campus and in the community.

**Music 560****Woodwind Ensembles for the Older Adult***0 units; 2 hours lecture per week to be arranged (maximum of 36 hours per semester)**Enrollment Limitation: audition (previous band or orchestra experience or ability to perform music of moderate difficulty on a standard orchestral woodwind instrument)**Noncredit*

These ensembles for the older adult rehearse and perform literature written for combinations of woodwinds in choirs of like instruments (all flutes or clarinets or saxophones) and mixed instruments. The ensembles include trios, quartets, quintets, and larger ensembles and may be combined with non-woodwind instruments to complete the instrumentation appropriate to the selected literature. Emphasis is placed on stylistic and historical performance practices, instrumental techniques, and musicianship. Performances are held on campus and in the community.

**Music 561****Brass Ensembles for the Older Adult***0 units; 2 hours lecture per week to be arranged (maximum of 36 hours per semester)**Enrollment Limitation: audition (previous band or orchestra experience or ability to perform music of moderate difficulty on a standard orchestral brass instrument)**Noncredit*

These ensembles for the older adult rehearse and perform literature written for combinations of brass instruments. The ensembles include trios, quartets, quintets, and larger ensembles and may be combined with non-brass instruments to complete the instrumentation appropriate to the selected literature. Emphasis is placed on stylistic and historical performance practices, instrumental techniques, and musicianship. Performances are held on campus and in the community.



**Music 562*****Percussion Ensembles for the Older Adult***

*0 units; 2 hours lecture per week to be arranged (maximum of 36 hours per semester)*

*Enrollment Limitation: audition (previous band or ensemble experience or ability to perform music of moderate difficulty on percussion instruments)*

*Noncredit*

These ensembles for the older adult rehearse and perform literature written for combinations of melody and/or rhythm percussion instruments. The ensembles include quartets, quintets, sextets, and larger ensembles and may be combined with wind or string instruments to complete the instrumentation appropriate to the selected literature. Emphasis is placed on instrumental techniques, improvisation, and musicianship. Performances are held on campus and in the community.

**Music 564**

(formerly Music 563)

***String Ensembles for the Older Adult***

*0 units; 2 hours lecture per week to be arranged (maximum of 36 hours per semester)*

*Enrollment Limitation: audition (previous orchestra experience or ability to perform music of moderate difficulty on a standard orchestral string instrument)*

*Noncredit*

These ensembles for the older adult rehearse and perform literature written for combinations of string instruments. The ensembles include trios, quartets, quintets, and larger ensembles, and may be combined with non-string instruments to complete the instrumentation appropriate to the selected literature. Emphasis is placed on stylistic and historical performance practices, instrumental techniques, and musicianship. Performances are held on campus and in the community.

**Music 565*****Community Band for the Older Adult***

*0 units; 4 hours lab per week to be arranged (maximum of 72 hours per semester)*

*Enrollment Limitation: previous band or orchestra experience or ability to perform music of moderate difficulty on a standard band instrument*

*Noncredit*

This ensemble for the older adult rehearses and performs traditional and contemporary compositions from the standard wind band literature. Emphasis is placed on stylistic and historical performance practices, instrumental techniques, and musicianship. Performances are combined with the College Community Band and are held on campus and in the community.

**Music 567*****Jazz Band for the Older Adult***

*0 units; 4 hours lab per week to be arranged (maximum of 72 hours per semester)*

*Enrollment Limitation: audition (ability to perform music of moderate difficulty on a standard jazz instrument)*

*Noncredit*

This ensemble for the older adult rehearses and performs traditional and contemporary jazz compositions. The literature includes works by composers such as Basie, Ellington, and Nestico, as well as opportunities for vocal jazz soloists. Emphasis is placed on section development, extended solos, and improvisation. Performances are combined with the Jazz Band or Big Band Jazz and are held on campus and in the community.

**Music 570*****Orchestra for the Older Adult***

*0 units; 4 hours lab per week to be arranged (maximum of 72 hours per semester)*

*Enrollment Limitation: audition (previous band or orchestra experience or ability to perform music of moderate difficulty on a standard orchestral instrument)*

*Noncredit*

This ensemble for the older adult rehearses and performs classics from the standard symphony orchestra literature including works for string and full ensembles. Emphasis is placed on stylistic and historical performance practices, instrumental techniques, and musicianship. Performances are combined with the Symphony Orchestra and are held on campus and in the community.

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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

### 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. Students must achieve a statistically determined passing score on the comprehensive predictor examination upon completion of the program prior to taking the NCLEX-RN®. Graduates must pass the NCLEX-RN® in order to become licensed and practice registered nursing in the state of California.

#### **Nursing Degree Options:**

Generic - Students who are not licensed as vocational nurses/psychiatric technicians and are not transferring from another accredited nursing program are considered generic students.

**Advanced Standing/Upward Mobility** - Prospective students who have had prior education in nursing or other health-related areas may request consideration for entry into the nursing program with advanced placement. Applicants would include Licensed Vocational/Practical Nurses, Licensed Psychiatric Technicians, and transfer students from accredited nursing programs. Advanced standing applicants are admitted to the program on a space available basis. Upon request, transfer students' transcripts will be individually evaluated for granting credit. Transfer students may be offered advanced standing. Licensed vocational nurses may enter the upward mobility option or 30-unit option (see below).

### **Program Prerequisites for the Associate Degree Nursing Program (All Students)**

1. Complete the following courses with a minimum 2.5 GPA:
  - a. Anatomy 30 or 32 and 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 Mathematics 80 or pass the Mathematics Competency Exam (not included in the required basic science 2.5 minimum GPA)
2. Nursing 48 and Nursing 145 with a minimum grade of C
3. Complete Degrees of Reading Power Test (DRP) with a passing score of 60 or greater.

### **Additional Prerequisites for Generic Students:**

1. Cumulative GPA of 2.5 in all courses completed since high school.
2. Complete the Test of Essential Academic Skills (TEAS) with a state recommended passing score. If a prospective student receives a score below the state recommended score, the student will be required to complete remediation and then retake the TEAS test.

### **Additional Prerequisites for Upward Mobility Students:**

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. Successful completion of a Challenge Exam.

**Application Filing Period:** The El Camino College Nursing Program accepts applications twice a year beginning each September and March. Each application period will last for three weeks.

The state of California requires all Registered Nurses (RNs) to have a valid Social Security or Tax Identification Number. Students seeking admission into the nursing program must provide proof of a valid social security or tax identification number to the nursing counselor prior to receiving a verification of eligibility documentation for admission consideration into the nursing program.

### **Application Review**

**Generic Students** - All complete applications will be reviewed and ranked according to Criteria 1-3 of the Multicriteria Enrollment Criteria. Students at the top of the ranking who have not taken the Assessment Technology Inc. (ATI) TEAS will be invited to take the test. Following completion of the ATI TEAS, student points will be recalculated including all five criteria. Selected students will then be notified via ECC email that they have been conditionally accepted into the nursing program. Upon receipt of an offer, applicants should accept or decline the offer and complete any further conditions of enrollment as stated in the email. Acceptance or refusal of the offer must be received in writing in the nursing office by the date specified in the email. Failure to reply by the specified date will result in the removal of the applicant's name from the applicant pool. Upon receipt of the applicant's

signed acceptance letter and attendance at a mandatory orientation, the offeree confers from conditional place to a confirmed place. Any applicant who accepts a place and attends an orientation but does not attend the first day of class will be dropped from the program and will not be eligible to reapply. Students who are not admitted to the program may reapply during the next application period. For more information, visit our website at [www.elcamino.edu/nursing](http://www.elcamino.edu/nursing).

**Upward Mobility** - All complete applications will be reviewed and ranked according to the cumulative GPA. Students at the top of the ranking who have not taken the ATI TEAS will be invited to take the test. Following completion of the ATI TEAS, student will be re-ranked according to the score achieved. Student selected will be notified via their ECC email address that they have been conditionally accepted into the nursing program. Upon receipt of a conditional offer, applicants should print out the attached documents and choose one of the following options: 1) accept the offer or decline the offer. Acceptance or refusal of the conditional offer must be received in writing in the nursing office by the date specified in the email. Failure to reply by specified date will result in the removal of the applicant's name from the application pool. Upon receipt of the applicant's signed acceptance letter and attendance at a mandatory orientation, the offer converts from a conditional place to a confirmed place. Any applicant who accepts placement and attends the orientation but does not attend the first day of class will be dropped from the program and will not be eligible to reapply.

**Transfer Students** – Credit for nursing course completed at another college will be evaluated on an individual basis by the Director of Nursing or the Director's designee. Credit can be achieved through the petition process as well.

**Waitlist:** There will be no waitlist. Students who are not admitted to the program may reapply during the next application period. Students who are not offered admission are encouraged to meet with a nursing counselor.

#### **Program Costs**

Nursing Program: In addition to registration fees, the costs for books, shoes, physical exam, CPR certification, name badges, patches, uniforms, stethoscope, and additional skills lab supplies are approximately \$1,000 for the first year.

#### **Major Requirements Generic Program**

All general education courses and nursing courses must be completed with a minimum grade of C before the student may enroll in the next course. Please contact a nursing counselor to determine course equivalencies.

<b>Course</b>	<b>Title</b>
NURS 150A	Beginning Nursing Process and Fundamental Skills I (4)
NURS 150B	Beginning Nursing Process and Fundamental Skills II (3.5)
NURS 151	Human Development and Health (2)
NURS 152	Introduction to Nursing Pharmacology (1)
NURS 153	Intermediate Nursing Process I (4.5)
NURS 154	Intermediate Nursing Process and Mental Health (4)
NURS 155	Health Assessment (1)
NURS 156	Advanced Nursing Pharmacology (1)
NURS 250	Intermediate Nursing Process and the Family (5.5)
NURS 251	Legal and Ethical Considerations in Nursing (1)
NURS 253	Intermediate Nursing Process II (4.5)
NURS 254	Advanced Nursing Process I (7)
NURS 255	Advanced Nursing Process II – Clinical Preceptorship (2.5)
ENGL 1B	Literature and Composition (3)
PSYC 5	General Psychology (3)
SOCI 101	Introduction to Sociology (3)

**Total Units: 50.5**

#### **Upward Mobility Option:**

All general education courses and nursing courses must be completed with a minimum grade of C. Please contact a nursing counselor to determine course equivalencies.

<b>Course</b>	<b>Title</b>
NURS 48	Dosage Calculations (2)
NURS 149	Preparation for Advanced Placement in Nursing (2)
NURS 154	Intermediate Nursing Process and Mental Health (4)
NURS 155	Health Assessment (1)
NURS 156	Advanced Nursing Pharmacology (1)
NURS 250	Intermediate Nursing Process and the Family (5.5)
NURS 251	Legal and Ethical Considerations in Nursing (1)
NURS 253	Intermediate Nursing Process II (4.5)
NURS 254	Advanced Nursing Process I (7)
NURS 255	Advanced Nursing Process II – Clinical Preceptorship (2.5)
ENGL 1B	Literature and Composition (3)
PSYC 5	General Psychology (3)
SOCI 101	Introduction to Sociology (3)
and	
	Complete the Communication and Analytical Thinking requirement (3 units)

**Total Units: 39.5**

Note: 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.

**30 Unit Non-Degree Track**

The Licensed Vocational Nurse may establish eligibility to take the state licensing examination to become a Registered Nurse in California only by completing a sequence of courses. The Associate Degree is not awarded upon completion of this program and the nurse will always be considered a non-graduate. Applicants are admitted as space is available. For more information, please contact the nursing department.

**General Program Information**

Board of Registered Nursing (BRN) Requirements: The BRN has approved a set curriculum at ECC which includes, in addition to nursing courses, sociology, psychology and a course in communication and analytical thinking. Please see document entitled: Sample Curriculum for Associate Degree Nursing Program. These additional courses are not required for entry into the nursing program but must be completed prior to graduation. Students are strongly encouraged to complete these classes prior to entry into the nursing program.

**El Camino College Associate in Science Degree:**

In addition to the nursing department and Board of Registered Nursing course requirements, students must meet the El Camino College A.S. degree general education requirements outlined in the college catalog. Please consult with a nursing counselor if you have questions. The Associate Degree Nursing Program is a demanding, rigorous program that requires advanced academic preparation, personal commitment, and a considerable amount of time in study and preparation outside of class. Mandatory general information sessions are available each semester to assist prospective applicants so they may learn more about careers in nursing, the El Camino College nursing program and its requirements, and how to formulate an educational plan to become a qualified applicant. Nursing courses must be taken in sequence. Clinical facilities require background checks which require a valid social security number.

**Required Program GPA:** Nursing students must maintain a minimum overall GPA of 2.0 to continue in the nursing program, graduate and receive an Associate in Science degree.

After a student is admitted into the nursing program, a full-time load is considered 10 units per semester. Students are expected to complete their nursing courses at El Camino College. Credit may be granted for course work completed at an accredited nursing program.

**Program Readmission and Course Repetition:**

Students who leave the nursing program are eligible to be readmitted to the program subject to availability of space. Only one single nursing course, in which a student has received a D or F grade, may be repeated. Policies related to progression and re-entry are available for review in the Nursing Office and are published in the Nursing Student Handbook. Student academic standing at the time of leaving the program will determine whether academic support courses will be prescribed for completion before re-entry. 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-RN®) and must pass the exam to practice in California. The NCLEX-RN® is developed by the National Council of State Boards of Nursing and is administered by computer nationally throughout the year. The California Board of Registered Nursing (BRN) requires that all students applying for the NCLEX be fingerprinted and submit a fingerprint card with the licensing examination application. The BRN protects the public by screening applicants for licensure in order to identify potentially unsafe practitioners. The BRN may deny applications for permanent licensure, interim permits and temporary licenses if the applicant has been found guilty of dishonesty; fraud or deceit; felony; child abuse; sex offender crimes; acts involving narcotics, dangerous drugs or devices; assault and/or battery; and other crimes. Applicants who have questions regarding limitations related to licensure should contact the California Board of Registered Nursing (916) 322-3350 or access its website at [www.m.ca.gov](http://www.m.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***Dosage Calculations**2 units; 3 hours lecture, 3 hours lab (9 week course)**Prerequisite: eligibility for Mathematics 73 or 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 101***Exploring Health Occupation Careers**2 units; 2 hours lecture**Prerequisite: eligibility for English 1A**Credit, degree applicable*

This is an introductory course for students considering careers in health care or wishing to become more familiar with the roles of other health care professionals. Students will explore career options and be introduced to the major job responsibilities and technical skill requirements of a variety of health care occupations. The information provided will enable students to match their abilities and interests to a specific health care occupation.

**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 with a minimum grade of C**Recommended Preparation: Mathematics 73 or 80**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), and transfer students 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 examine problems associated with ingestive, excretory, physical integrity and oxygenation (O<sub>2</sub>CO<sub>2</sub>) needs. Course discussion will also include transition to the registered nursing role and the impact of legal and ethical boundaries. Students will practice basic nursing skills and demonstrate competency.

**Nursing 150A***Beginning Nursing Process and Fundamental Skills I**4 units; 5 hours lecture, 9 hours lab to be arranged (9 week course)**Enrollment Limitation: admission to the Nursing Program**Credit, degree applicable**Transfer CSU*

In this course, students gain the skills and knowledge necessary to provide basic nursing care to the individual and family. Concepts of basic human needs and structural variables such as age, sex, and ethnicity are studied. Select psychomotor skills such as dressing changes and medication administration are practiced in the skills and simulation labs in preparation for clinical practice.

**Nursing 150B***Beginning Nursing Process and Fundamental Skills II**3.5 units; 3 hours lecture, 12 hours lab to be arranged (9 week course)**Prerequisite: Nursing 150A with a minimum grade of C**Credit, degree applicable**Transfer CSU*

In this course, students will focus on the skills and knowledge needed to assess and care for a patient in the hospital setting. Emphasis will be placed on the nursing process, therapeutic communication, and providing basic care to the individual. Fundamental nursing skills such as medication administration will be carried out in the clinical setting. Particular emphasis will be placed on caring for the geriatric population. The nurse's ethical and legal responsibilities of patient care within the hospital setting will also be addressed.

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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 is designed for nursing students to explore the impact of biopsychosocial growth and development principles from conception through death. The emphasis is on analyzing the impact of these principles on health. The nurse's role in applying this knowledge throughout the life span is explored through community observations and interview. Variables that influence health such as culture, family, and individual dynamics are examined and analyzed. This course sets the groundwork for initial clinical practice.

**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 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 per week to be arranged**Prerequisite: Nursing 150B, 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**Enrollment Limitation: admission to the Nursing Program**Credit, degree applicable**Transfer CSU*

This course will help the student to develop and utilize physical assessment and history-taking skills necessary to care for clients. The course focuses on the communication techniques and critical thinking skills necessary to elicit a health history. Physical Assessment skills will be developed to determine normal and abnormal findings of various body systems, including a general functional assessment. Results are analyzed during the clinical lab while using the nursing process.

**Nursing 156*****Advanced Nursing Pharmacology****1 unit; 1 hour lecture**Prerequisite: 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 150B with a minimum grade of C 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 application of the concepts of pathophysiology will assist the nurse in providing effective, scientifically based patient care.

**Nursing 250*****Intermediate Nursing Process and the Family***

5.5 units; 3 hours lecture, 7.5 hours lab per week to be arranged

Prerequisite: Nursing 153, 154, 155 and 156 with a minimum grade of C in prerequisite

Transfer CSU

This course focuses on the theory and clinical application of concepts related to the nursing care of families in the childbearing and childrearing stages. Using the nursing process, students will apply the El Camino College Nursing Program's theoretical framework to meet the basic needs of families as they move through the life stages of pregnancy, birth, and childhood. The importance of structural variables, physical assessment skills specific to maternal-child nursing, and pathological conditions that occur during childbirth, infancy, childhood, and adolescence will be emphasized.

**Nursing 251*****Legal and Ethical Considerations in Nursing***

1 unit; 1 hour lecture

Prerequisite: Nursing 153, 154, 155 and 156 with a minimum grade of C in prerequisite

Credit, degree applicable

Transfer CSU

In this course, students will analyze the legal responsibilities associated with the scope of nursing practice as defined by the Board of Registered Nursing. Other parameters and standards of law impacting the nursing profession will be examined. Scenarios that pose ethical dilemmas for the registered nurse will be debated using ethical theories and principles.

**Nursing 253*****Intermediate Nursing Process II***

4.5 units; 2 hours lecture, 7.5 hours lab per week to be arranged

Prerequisite: Nursing 153, 154, 155 and 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 per week to be arranged

Prerequisite: Nursing 250, 251 and 253 with a minimum grade of C in prerequisite or equivalent

Credit, degree applicable

Transfer CSU

This course focuses on pathophysiologic concepts and nursing management essential to critical care and emergency nursing. Patients with acute and chronic cardiopulmonary, hepatic, renal, and multi-system dysfunction will be selected for critical care clinical experiences. Leadership and management skills are introduced and applied in the clinical setting. Students apply the nursing process and prioritize nursing care for a group of patients with multiple needs imbalances. The role of the nurse in the management of patient care following a disaster is presented and students participate in an actual disaster drill in a local hospital.

**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: English A

Credit, degree applicable

Transfer CSU, UC

This course is an introduction to the basic principles of nutrition as they relate to the health and physical wellness of individuals. The topics covered include macronutrients, micronutrients, diet and health, weight management, dietary analysis, current nutrition trends, food safety, and physical fitness.

### Nutrition and Foods 15

#### *Nutrition for Infants and Young Children*

3 units; 3 hours lecture

Recommended Preparation: English A

Credit, degree applicable

Transfer CSU

This course covers the nutritional needs during the growth and development of infants and young children. Topics include nutrient sources and functions, assessment of nutritional status and food intake, food safety, government resources, menu planning, and integration of nutrition education into early childhood education programs.

### Nutrition and Foods 99

(formerly 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\*

This course provides special advanced studies in a subject field of Nutrition and Foods not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Nutrition and Foods projects (54 hours per unit).

\*Note: Transfer limitations apply.

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 1A

Credit, degree applicable

Transfer CSU, UC

This introductory course in oceanography presents the ocean in terms of its physical, chemical and biological environments. The topics include studies of: formation and modification of various wave types; tidal behavior; formation of water masses and ocean currents; beaches and the changing shoreline; coral reefs; physical and chemical properties of ocean water; marine environments; marine sediments; origin of sea floor and coastline features; the spreading sea floor and drifting continents.

### Oceanography 10H

#### *Honors Introduction to Oceanography*

4 units; 3 hours lecture, 3 hours lab

Recommended Preparation: eligibility for English 1A

Credit, degree applicable

Transfer CSU

This honors course, intended for students in the Honors Transfer Program, presents the ocean in terms of its physical, chemical and biological environments. The topics include studies of: formation and modification of various wave types; tidal behavior; formation of water masses and ocean currents; beaches and changing shoreline; coral reefs; physical and chemical properties of ocean water; marine environments; marine sediments; origin of sea floor and coastline features; the spreading sea floor and drifting continents. This course is enriched through additional and more vigorous reading, writing, and research assignments.

Note: Students may take either Oceanography 10 or Oceanography 10H. Duplicate credit will not be awarded for Oceanography 10 and Oceanography 10H.

## PARALEGAL STUDIES

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

*Business Division*

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

The paralegal studies program is designed to train students to assist lawyers in private firms, legal departments of companies, or governmental agencies. Upon successful completion of the program requirements, the student will have the ability to apply theories and principles of law to prepare and interpret legal documents, draft pleadings including court forms, prepare for litigation, and apply legal ethics and case management techniques in a legal environment. Students will also develop skills for client interaction and legal research, including on-line legal research. Competency will be assessed regularly by examinations and assignments. This program is approved by the American Bar Association.

#### General Information

This program does not prepare students for law school or the practice of law. "No person shall practice law in this state unless he/she is an active member of the State Bar." Cal. Bus. & Prof. Code, § 6125.

#### Program Prerequisite

Entrance to the program is gained by successful completion of Law 11, Introduction to Legal Research.

#### Major Requirements

The American Bar Association has specific course requirements for 18 units of general education. All students in this program must consult a counselor for courses that satisfy the 18 units of general education.

#### Course Title

*Required Core: 21-22 units*

PARA 1	Introduction to Paralegal Studies (3)
LAW 4	Legal Environment of Business (4)
or	
LAW 5	Business Law (3)
LAW 11	Introduction to Legal Research (3)
LAW 16	Civil Procedure (3)
LAW 17	Legal Research and Writing (3)
LAW 19	Law and Computers (3)
LAW 20	Paralegal Seminar (3)

*12-13 units from:*

LAW 12	Probate Procedures (3)
LAW 13	Family Law (3)
LAW 14	Tort Law (3)
LAW 15	Civil and Criminal Evidence (3)
LAW 18	Wills, Trusts and Estate Planning (3)
LAW 95	Cooperative Work Experience Education (2-4)
RE 12A	Legal Aspects of Real Estate (3)

**Total Units: 33-35**

#### 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.

#### 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 of Achievement

##### Course Title

*Required Core: 21-22 units*

PARA 1	Introduction to Paralegal Studies (3)
LAW 4	Legal Environment of Business (4)
or	
LAW 5	Business Law (3)
LAW 11	Introduction to Legal Research (3)
LAW 16	Civil Procedure (3)
LAW 17	Legal Research and Writing (3)
LAW 19	Law and Computers (3)
LAW 20	Paralegal Seminar (3)
<i>12-13 units from:</i>	
LAW 12	Probate Procedures (3)
LAW 13	Family Law (3)
LAW 14	Tort Law (3)
LAW 15	Civil and Criminal Evidence (3)
LAW 18	Wills, Trusts and Estate Planning (3)
LAW 95	Cooperative Work Experience Education (2-4)
RE 12A	Legal Aspects of Real Estate (3)

**Total Units: 33-35**

#### 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.

For Gainful Employment program information, please visit [www.elcamino.edu/academics/business/paralegal](http://www.elcamino.edu/academics/business/paralegal)

**Paralegal Studies 1***Introduction to Paralegal Studies*

3 units; 3 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****PHILOSOPHY****A.A. Degree***Behavioral and Social Sciences Division**www.elcamino.edu/academics/behavioralsocial*

The degree provides students with a foundation in philosophical inquiry. Upon successful completion, students will understand the major concepts and issues that have shaped philosophical traditions. This will include the ability to critically analyze contemporary social and moral issues and to assess the influential positions on theories of truth and the nature of reality. The student will also be able to analyze the logical structure of arguments and the rules of critical reasoning in their own and others' writing and thinking. Competencies will be assessed regularly through examinations, projects, and written reports. This major prepares students to pursue careers in education, law, health, and other fields where analytical skills are required.

**Course Title****Required Core: 6 units**

PHIL 106 Introduction to Symbolic Logic (3)

PHIL 101 Introduction to Philosophy (3)

or

PHIL 103 Ethics and Society (3)

**6 units from:**

PHIL 111 History of Ancient and Medieval Philosophy (3)

PHIL 112 History of Modern Philosophy (3)

PHIL 113 Contemporary Philosophy (3)

**6 units from:**

HIST 140 History of Early Civilizations (3)

HIST 141 History of Modern Civilizations (3)

PHIL 105 Critical Thinking and Discourse (3)

PHIL 107 Philosophy of Religion (3)

PHIL 114 Asian Philosophy (3)

PHIL 115 Existentialism (3)

PHIL 117 Political Philosophy (3)

or

POLI 7 Political Philosophy (3)

PHIL 120 Ethics, Law and Society (3)

**Total Units: 18**

Note: PHIL 117 is the same course as POLI 7.

**Preparation for the Philosophy Transfer Major**

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

## PHILOSOPHY

### AA-T 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.

The Associate in Arts for Transfer (AA-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AA-T are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AA-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education - Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AA-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AA-T.

### Course Title

#### *Required Core: 6 units*

PHIL 106 Introduction to Symbolic Logic (3)

PHIL 101 Introduction to Philosophy (3)

or

PHIL 103 Ethics and Society (3)

#### *List A: 3 units*

PHIL 105 Critical Thinking and Discourse (3)

PHIL 111 History of Ancient and Medieval Philosophy (3)

PHIL 112 History of Modern Philosophy (3)

PHIL 114 Asian Philosophy (3)

PHIL 120 Ethics, Law and Society (3)

#### *List B: 6 units*

#### *Any course from List A not already completed*

HIST 140 History of Early Civilizations (3)

HIST 141 History of Modern Civilizations (3)

PHIL 107 Philosophy of Religion (3)

#### *List C: 3 units*

#### *Any course from List A or List B not already completed*

PHIL 115 Existentialism (3)

PHIL 117 Political Philosophy (3)

or

POLI 7 Political Philosophy (3)

#### **Total Units: 18**

Note: PHIL 117 is the same course as POLI 7.

**Philosophy 101***(formerly Philosophy 2)***Introduction to Philosophy***3 units; 3 hours lecture**Recommended Preparation: eligibility for English 1A**Credit, degree applicable**Transfer CSU, UC*

This course introduces philosophical ideas and methods concerning knowledge, reality and values. Expected topics will include the sources and limits of knowledge, and the nature of reality. Other topics that may be examined from a philosophical perspective include the nature of the self, religion, science, language, beauty and art, political theory, or mind.

**Philosophy 103***(formerly 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 105***(formerly 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. Students' papers and other writings will total a minimum of 6,000-8,000 words.

**Philosophy 106***(formerly Philosophy 8)***Introduction to Symbolic 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 the skills and techniques needed to do so effectively. The focus will be on the basic elements of classical and propositional logic with a brief introduction to predicate logic. Also discussed will be informal fallacies, inductive logic, and language.

**Philosophy 107***(formerly 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 111***(formerly 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 112****History of Modern Philosophy***3 units; 3 hours lecture**Recommended Preparation: eligibility for English 1A**Credit, degree applicable**Transfer CSU, UC*

This course addresses 16th through 18th century Western philosophy with an emphasis on broad epistemological and metaphysical developments in philosophical thought from Descartes to Kant, and may include some precursors and successors. Some of the concepts explored include empiricism, rationalism, idealism, the limits of knowledge, skepticism, the nature of reality, and arguments for and against the existence of God.

**Philosophy 113****Contemporary Philosophy***3 units; 3 hours lecture**Recommended Preparation: eligibility for English 1A**Credit, degree applicable**Transfer CSU, UC*

This course addresses the main themes and ideas of 19th and 20th century philosophy. In addition to major contributions in the philosophy of language and ethics, some of the major philosophical movements covered include existentialism, phenomenology, analytic philosophy and logical positivism, pragmatism, plus post-modernism and post-structuralism.

**Philosophy 114**

(formerly 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 115**

(formerly 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 existentialists such as Kierkegaard, Dostoevsky, and Heidegger, and the atheistic existentialists such as Nietzsche, Camus, and Sartre. Issues that will be examined include authenticity, free will, responsibility for one's character and actions, the essence, possibilities and limits of human beings, and the meaning of life.

**Philosophy 117**

(formerly Philosophy 17)

**Political Philosophy**

3 units; 3 hours lecture

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

In this course, students will examine political theory as presented in the primary works of major Western thinkers from Plato to Marx. Fundamental issues to be explored include human nature, justice, power, the role of the state, and the legitimate scope of government.

*Note: Philosophy 117 is the same course as Political Science 7.***Philosophy 120**

(formerly 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.

**PHOTOGRAPHY****A.S. Degree and Certificate of Achievement***Fine Arts Division*[www.elcamino.edu/academics/finearts](http://www.elcamino.edu/academics/finearts)

The photography program provides students with a comprehensive foundation in skills, techniques, and processes for commercial and creative photography. Each student acquires practical and creative skills relating to camera operation, films, color theory, photo composition, lighting, processing, printing, and business operations through a wide range of studio courses. Proficiencies are demonstrated through class and laboratory projects, critiques, essays, and objective tests. Program assessment is measured by portfolios, juried and public exhibitions, program completion, and periodic program review. Students qualify to pursue a variety of careers in the field of professional photography.

A minimum of 12 units must be completed at El Camino College.

Course	Title
<b>Required Core: 20-21 units</b>	
PHOT 101	Elementary Photography (2)
or	
PHOT 106	Basic Photojournalism (3)
or	
JOUR 6	Basic Photojournalism (3)
PHOT 150	The Art of Photography (3)
or	
ART 150	The Art of Photography (3)
PHOT 102	Basic Photography (3)
PHOT 202	Intermediate Photography (4)
PHOT 203	Advanced Photography (4)
PHOT 223A	Theory of Color/Color Printing (4)
<b>3 units from:</b>	
PHOT 204	Portraiture (3)
PHOT 206ab*	Advanced Photojournalism (2)
or	
JOUR 7ab*	Advanced Photojournalism (2)
PHOT 223B	Intermediate Color Photography/Printing (4)
PHOT 254	Intermediate 35mm Black and White Photography (2)
PHOT 257	Creative Photographic Processes (2)
ART 141	Digital Art Fundamentals (3)
FILM 122	Production I (3)
FILM 234	Camera and Lighting (3)
<b>3 units from:</b>	
ART 130	Two-Dimensional Design I (3)
ART 142	Digital Photography (3)
BUS 11	Accounting for Small Business (3)
BUS 12	Advertising (3)
PHYS 11	Descriptive Introduction to Physics (3)
<b>Total Units: 26-27</b>	

**Recommended Electives:**

ART 101	Art and Visual Culture : A Global Perspective (3)
ART 110	Drawing Fundamentals I (3)
ART 143	Digital Publishing Fundamentals (3)
BUS 20	Business Management (3)
BUS 24	Small Business Entrepreneurship (3)

Note: PHOT 106 is the same course as JOUR 6. Course credit is limited to PHOT 106 or JOUR 6.

Note: PHOT 150 is the same course as ART 150. Course credit is limited to PHOT 150 or ART 150.

\*Note: one semester of PHOT 206ab or JOUR 7ab may be counted for the major.

**Certificate of Achievement**

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

**Photography Certificate of Achievement****Course Title****Required Core: 17-18 units**

PHOT 101	Elementary Photography (2)
or	
PHOT 106	Basic Photojournalism (3)
or	
JOUR 6	Basic Photojournalism (3)
PHOT 102	Basic Photography (3)
PHOT 202	Intermediate Photography (4)
PHOT 203	Advanced Photography (4)
PHOT 223A	Theory of Color/Color Printing (4)

**9 units from:**

FILM 234	Camera and Lighting (3)
PHOT 204	Portraiture (3)
PHOT 206ab*	Advanced Photojournalism (2)
or	
JOUR 7ab*	Advanced Photojournalism (2)
PHOT 223B	Intermediate Color Photography/Printing (4)
PHOT 254	Intermediate 35mm Black and White Photography (2)
PHOT 257	Creative Photographic Processes (2)

**Total Units: 26-27**

Note: PHOT 106 is the same course as JOUR 6. Course credit is limited to PHOT 106 or JOUR 6.

\*Note: one semester of PHOT 206ab or JOUR 7ab may be counted for the major.

For Gainful Employment program information, please visit [www.elcamino.edu/academics/finearts/photo](http://www.elcamino.edu/academics/finearts/photo)

**Photography 99**

(formerly 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\*

This course provides special advanced studies in a subject field of Photography not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Photography projects (54 hours per unit).

\*Note: Transfer limitations apply.

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

**Photography 101**

(formerly 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 101 and Photography 102 is one course.

**Photography 102**

(formerly Photography 1)

**Basic Photography**

3 units; 2 hours lecture, 3 hours lab

Prerequisite: Photography 106 or Photography 101 with a minimum grade of C in prerequisite or equivalent

Credit, degree applicable

Transfer CSU, UC\*

This is a course in black and white still photography with an emphasis on the use of the 4 x 5 view camera, photographic equipment and film/analog and digital materials; photographic chemistry and mathematics, optics and physics of light; composition, studio lighting and creative expression. Laboratory techniques, including film processing, film/analog print making and digital printing are an integral part of this course.

\*Note: The maximum UC credit allowed for students completing Photography 102 and Photography 101 is one course.

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

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**Photography 106**

(formerly Photography 10)

**Basic Photojournalism**

3 units; 2 hours 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 106 is the same course as Journalism 6.***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 art. The course will also cover the aesthetic and cultural impact of photography as art. Also included is an examination of the techniques and methods of traditional and digital photography. Students will learn camera functions and develop their ability to analyze, evaluate, and compose photographs.

*Note: Photography 150 is the same course as Art 150. Course credit is limited to Photography 150 or Art 150.***Photography 202**

(formerly Photography 2)

**Intermediate Photography**

4 units; 2 hours lecture, 6 hours lab

*Prerequisite: Photography 102 with a minimum grade of C**Credit, degree applicable**Transfer CSU*

This course emphasizes film and digital photography as a creative and commercial art. The basics of commercial, portraiture, still life and fine art photography are covered. Intermediate photographic lighting and black and white printing techniques are introduced.

**Photography 203**

(formerly Photography 3)

**Advanced Photography**

4 units; 2 hours lecture, 6 hours lab

*Prerequisite: Photography 202 with a minimum grade of C**Credit, degree applicable**Transfer CSU*

This course focuses on photography as a commercial and creative practice. Basic business practices for the photographer, along with fashion, industrial, advertising and product digital and film photography are covered. Advanced lighting designs and techniques, and printing skills are introduced. The production of professional portfolio quality digital and film photographic prints is emphasized.

**Photography 204**

(formerly Photography 4)

**Portraiture**

3 units; 2 hours lecture, 3 hours lab

*Prerequisite: Photography 102 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 206ab**

(formerly Photography 11ab)

**Advanced Photojournalism**

2 units; 1 hour lecture, 3 hours lab

*Prerequisite: Journalism 6 or Photography 106 with a minimum grade of C in prerequisite or equivalent**Credit, degree applicable**Transfer CSU*

This course provides instruction and laboratory experience in the taking and processing of photographs for publication in the college newspaper, newspaper website and news magazine. Students also receive experience in news, feature and sports photo editing, photo essay page design and layout, as well as digital photography and photo scanning techniques using Photoshop. All students enrolled in this course produce content for scholastic competition on the regional, state and national level.

*Note: This course may be taken two semesters for either Journalism or Photography credit.**Note: Photography 206ab is the same course as Journalism 7ab.***Photography 223A**

(formerly Photography 23A)

**Theory of Color/Color Printing**

4 units; 2 hours lecture, 6 hours lab

*Prerequisite: Photography 102 with a minimum grade of C or equivalent**Credit, degree applicable**Transfer CSU*

This course covers the theory and techniques of color digital and color film still photography. Emphasis is placed on the processing of various types of color negative film, color film and color digital image printing, and color cast correction. Color theory, the psychology of color, and the effects of various light sources on color temperature are included.

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

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### Photography 223B

(formerly Photography 23B)

#### *Intermediate Color Photography/Printing*

4 units; 2 hours lecture, 6 hours lab

*Prerequisite: Photography 223A with a minimum grade of C Credit, degree applicable*  
*Transfer CSU*

This course covers the advanced theory and practice of color digital and film still photography with an emphasis on the construction, processing and printing of color photographic materials. The additive color process will be introduced as well as techniques for printing color transparencies on color reversal paper, printing and processing photographic prints from color negatives, and making color balanced photographs and digital prints.

### Photography 254

(formerly Photography 54)

#### *Intermediate 35mm Black and White Photography*

2 units; 1 hour lecture, 3 hours lab

*Prerequisite: Photography 101 with a minimum grade of C Credit, degree applicable*  
*Transfer CSU, UC*

In this course, students explore intermediate-level black and white 35mm photographic techniques and processes with an emphasis on print quality. Students are introduced to the imaginative use of hand-colored prints, infrared and high contrast graphic films and digital images.

### Photography 257

(formerly Photography 57)

#### *Creative Photographic Processes*

2 units; 1 hour lecture, 3 hours lab

*Prerequisite: Photography 254 with a minimum grade of C Credit, degree applicable*  
*Transfer CSU, UC*

This is a course in creative photography with an emphasis on non-silver based photographic materials, creative black and white photographic processes, and digital processes. This will include the use of non-silver photographic emulsions applied to non-traditional surfaces and the creation of photographic books.

## PHYSICAL EDUCATION

### A.A. Degree and Certificate of Accomplishment

*Health Sciences and Athletics Division*

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

The degree provides an orientation to the profession through participation in diverse physical activities and study of the dimensions of exercise. Students will acquire the ability to utilize principles of human anatomy, physiology, and behavioral processes in a variety of exercise and sport applications. Competencies will be assessed by a student's ability to solve problems in exercise program design and to evaluate movement skills, tactics, and strategies in various physical activities. Upon completion of the program, students will enhance their ability to pursue advanced degree options or entry-level positions in the discipline.

#### Course Title

##### *Required Core: 16 units*

ANAT 30	Essentials of Anatomy and Physiology (4)
PSYC 5	General Psychology (3)
PE 277	Introduction to Kinesiology and Physical Education (3)
PE 280	Exercise and Nutrition Programs for Fitness and Weight Management (3)
FAID 1	First Aid, Cardiopulmonary Resuscitation (CPR) and Basic Emergency Care (3)

Plus 4 units of activity-units distributed over a minimum of 3 categories to include: Aquatics, Combatives, Dance, Fitness, Individual/Dual Activities, Intercollegiate Sports, and Team Activities

#### **Aquatics:**

PE 240	Beginning Swimming (1)
PE 241	Intermediate/Advanced Swimming (1)
PE 244	Springboard Diving (1)
PE 247	Swimming, Lifeguard Training (1)
PE 248	Swimming, Water Safety Instructor (2)
PE 249	Swimming for Fitness (1)
PE 402	Adapted Swimming and Hydroexercise (1)

#### **Combatives:**

PE 18	Boxing (1)
PE 220	Naginata: A Japanese Martial Art (1)
PE 221	Combative Arts and Self Defense (1)

#### **Dance:**

DANC 110	Beginning Dance (2)
DANC 120A	Beginning Ballet A (2)
DANC 120B	Beginning Ballet B (2)
DANC 130A	Beginning Modern Dance A (2)
DANC 130B	Beginning Modern Dance B (2)
DANC 140	Jazz Dance I (2)
DANC 161	Tap Dance I – Beginning (1)
DANC 162	Hip Hop Dance (2)
DANC 164	World Dance (1)
DANC 165	African Dance (1)
DANC 167	Social and Ballroom Dance (1)

DANC 168	Latin Social Dance (2)	PE 66abc	Off-Season Training for Men's Intercollegiate Tennis Team (1)
DANC 220A	Intermediate Ballet A (2)	PE 70abc	Men's Intercollegiate Soccer Team (3)
DANC 230A	Intermediate Modern Dance A (2)	PE 71abc	Off-Season Training for Men's Intercollegiate Soccer Team (1)
DANC 240	Jazz Dance II (2)	PE 75abc	Intercollegiate Track and Field Teams (3)
DANC 250	Pilates Mat Class (3)	PE 76abc	Off-Season Training for Intercollegiate Track and Field Teams (1)
DANC 261	Tap Dance II – Intermediate (2)	PE 80abc	Men's Intercollegiate Volleyball Team (3)
DANC 262	Commercial Dance (2)	PE 81abc	Off-Season Training for Men's Intercollegiate Volleyball Team (1)
DANC 265	Intermediate African Dance (2)	PE 85abc	Men's Intercollegiate Water Polo Team (3)
DANC 268	Intermediate Latin Social Dance (2)	PE 86abc	Off-Season Training for Men's Intercollegiate Water Polo Team (1)
<b>Fitness:</b>		PE 87abc	Women's Intercollegiate Water Polo Team (3)
PE 2	Walking for Fitness (1)	PE 105abc	Women's Intercollegiate Basketball Team (3)
PE 10	Body Conditioning and Physical Fitness (1)	PE 106abc	Off-Season Training for Women's Intercollegiate Basketball Team (1)
PE 54	Weight Training (1)	PE 110abc	Women's Intercollegiate Volleyball Team (3)
PE135abcd	Sport-Specific, Periodized Training for Athletes (1)	PE 111abc	Off-Season Training for Women's Intercollegiate Volleyball Team (1)
PE 245	Water Aerobics (1)	PE 115abc	Women's Intercollegiate Tennis Team (3)
PE 254	Aerobic Fitness (1)	PE 116abc	Off-Season Training for Women's Intercollegiate Tennis Team (1)
PE 257	Yoga for Health and Fitness (1)	PE 120abc	Women's Intercollegiate Softball Team (3)
PE 258	Power Vinyasa Yoga (1)	PE 121abc	Off-Season Training for Women's Intercollegiate Softball Team (1)
PE 259	Circuit Training (1)	PE 132abc	Women's Intercollegiate Badminton Team (3)
PE 260	Basic Principles of Fitness and Weight Control (1)	PE 133abc	Off-season Training for Women's Intercollegiate Badminton Team (1)
PE 400	Adapted Fitness (1)	PE 140abc	Intercollegiate Sand Volleyball Team (3)
PE 401	Adapted Strength Training (1)	<b>Team Activities:</b>	
PE 404	Adapted Cardiovascular Fitness (1)	PE 4	Basketball (1)
PE 409	Adapted Yoga (1)	PE 7	Baseball (1)
<b>Individual/Dual Activities:</b>		PE 74	Soccer (1)
PE 47	Introduction to Indoor Rock Climbing (1)	PE 233	Pep Squad and Cheer (1)
PE 204	Badminton (1)	PE 234ab	Pep Squad and Cheer Competition (1)
PE 208	Bowling (1)	PE 253	Volleyball (1)
PE 224	Golf (1)	PE 255	Beach Volleyball (1)
PE 251	Tennis (1)	<b>Physical Education Electives: 2-3 units</b>	
<b>Intercollegiate Sports:</b>		PE 201	Introduction to Adapted Physical Education (2)
PE 5abc	Men's Intercollegiate Baseball Team (3)	PE 217	Sports Officiating (2)
PE 6abc	Off-Season Training for Men's Intercollegiate Baseball Team (1)	PE 270	Fitness and Sports Nutrition (3)
PE 15abc	Men's Intercollegiate Basketball Team (3)	PE 272	Care and Prevention of Athletic Injuries (3)
PE 16abc	Off-Season Training for Men's Intercollegiate Basketball Team (1)	PE 275	Sport Psychology (3)
PE 20abc	Intercollegiate Cross Country Teams (3)	PE 290	Personal Fitness Trainer (3)
PE 21abc	Off-Season Training for Intercollegiate Cross Country Teams (1)	<b>Total Units: 22-23</b>	
PE 35abc	Men's Intercollegiate Football Team (3)		
PE 36abc	Off-Season Training for Men's Intercollegiate Football Team (1)		
PE 45abc	Men's Intercollegiate Golf Team (3)		
PE 46abc	Off-Season Training for Men's Intercollegiate Golf Team (1)		
PE 57abc	Intercollegiate Swimming Teams (3)		
PE 58abc	Off-Season Training for Intercollegiate Swimming Teams (1)		
PE 60abc	Women's Intercollegiate Soccer Team (3)		
PE 61abc	Off-Season Training for Women's Intercollegiate Soccer Team (1)		
PE 65abc	Men's Intercollegiate Tennis Team (3)		

### Preparation for the Physical Education Transfer Major

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

### Certificate of Accomplishment

A Certificate of Accomplishment will be granted upon completion of all program requirements.

### Fitness Trainer Certificate of Accomplishment

Course	Title
FAID 1	First Aid, Cardiopulmonary Resuscitation (CPR) and Basic Emergency Care (3)
PE 10	Body Conditioning and Physical Fitness (1)
PE 277	Introduction to Kinesiology and Physical Education (3)
PE 280	Exercise and Nutrition Programs for Fitness and Weight Management (3)
PE 290	Personal Fitness Trainer (3)

**Total Units: 13**



## PHYSICAL EDUCATION

### Kinesiology AA-T Degree

*Health Sciences and Athletics Division*

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

The kinesiology program provides a foundation for the study of diverse dimensions of exercise science, sport, and movement studies. Upon completion of the program, students will be prepared to transfer and major in kinesiology. Students will have knowledge and skills for advancement into a number of kinesiology fields, such as adapted physical education, athletic training, coaching, exercise science, fitness specialist, kinesiotherapy, and teaching. Competency will be assessed by a student's ability to solve problems in exercise science, exercise program design and to demonstrate and/or evaluate movement skills, tactics, and strategies in various physical activities.

The Associate in Arts for Transfer (AA-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AA-T are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AA-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education - Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AA-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AA-T.

**Course Title****Required Core: 11 units**

Select Option 1 or Option 2

**Option 1**

PE 277 Introduction to Kinesiology and Physical Education (3)

ANAT 32 General Human Anatomy (4)

PHYO 31 Human Physiology (4)

or

**Option 2**

PE 277 Introduction to Kinesiology and Physical Education (3)

APHY 34A Anatomy and Physiology I (4)

APHY 34B Anatomy and Physiology II (4)

and

**3-5 units of Movement-Based Courses**

Select a maximum of one course from any two to three categories:

**Aquatics:**

PE 240 Beginning Swimming (1)

PE 241 Intermediate/Advanced Swimming (1)

PE 250 Techniques of Surfboard Riding (1)

**Combative:**

PE 221 Combative Arts and Self Defense (1)

**Dance:**

DANC 130A Beginning Modern Dance A (2)

DANC 167 Social and Ballroom Dance (1)

DANC 168 Latin Social Dance (2)

DANC 250 Pilates Mat Class (3)

**Fitness:**

PE 10 Body Conditioning and Physical Fitness (1)

PE 54 Weight Training (1)

PE 245 Water Aerobics (1)

PE 249 Swimming for Fitness (1)

PE 254 Aerobic Fitness (1)

PE 257 Yoga for Health and Fitness (1)

**Individual Sports:**

PE 204 Badminton (1)

PE 208 Bowling (1)

PE 224 Golf (1)

PE 251 Tennis (1)

**Team Sports:**

PE 4 Basketball (1)

PE 74 Soccer (1)

PE 253 Volleyball (1)

and

**List A: 7-9 units**

BIOL 10 Fundamentals of Biology (4)

CHEM 1A General Chemistry I (5)

or

CHEM 4 Beginning Chemistry (5)

or

CHEM 21A Survey of General and Organic Chemistry (4)

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

PHYS 2A General Physics (4)

MATH 150 Elementary Statistics with Probability (4)

or

PSYC 9A Introduction to Elementary Statistical Methods for the Study of Behavior (4)

or

SOC 109 Introduction to Elementary Statistical Methods for the Study of Behavior (4)

**Total Units: 21-25****Recommended Electives:**

CH 1 Personal and Community Health Issues (3)

NFOO 11 Nutrition (3)

PE 272 Care and Prevention of Athletic Injuries (3)

PE 280 Exercise and Nutrition Programs for Fitness and Weight Management (3)

PSYC 5 General Psychology (3)

## Physical Education

### 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 217

#### *Sports Officiating*

2 units; 2 hours lecture

*Recommended Preparation: English 84 and English B*

*Credit, degree applicable*

*Transfer CSU, UC\**

This course provides instruction in the basic principles and applications of sports officiating. A range of topics including officiating objectives, conduct, communication skills, conflict management, fitness, legal rights and responsibilities, and career development will be discussed.

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

### Physical Education 260

#### *Basic Principles of Fitness and Weight Control*

1 unit; 1 hour lecture

*Corequisite: Physical Education 2 or 3 or 4 or 10 or 18 or 47 or 54 or 74 or 135abcd or 240 or 241 or 245 or 249 or 250 or 251 or 253 or 254 or 257 or 258 or 259 or 400 or 401 or 404 or 409*

*Recommended Preparation: eligibility for English A and English 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.*

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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 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 1A*

*Credit, degree applicable*

*Transfer CSU, UC*

This course provides the future athletic trainer, as well as coach and health care professional, the concepts surrounding the profession of athletic training. Emphasis is placed on the principles, techniques, and ethics in the prevention and care of athletic injuries. Study areas include the sports medicine team, legal issues, risk management, pathology of injury, management skills, and specific sports injuries and conditions.

### Physical Education 275

#### *Sport Psychology*

3 units; 3 hours lecture

*Recommended Preparation: eligibility for English 1A and Psychology 5*

*Credit, degree applicable*

*Transfer CSU*

This course is a scientific study of the psychological factors associated with participation and performance in sport activities. Emphasis will be placed on how psychological principles and research can be used to understand and enhance sport performance. Topics will include historical and theoretical perspectives of sport psychology, research methods, and the relationship between sport performance and various personality, motivational, and social psychological variables. Gender and age issues, as well as the effects and management of unhealthy behaviors, will be discussed.

### Physical Education 277

#### *Introduction to Kinesiology and Physical Education*

3 units; 3 hours lecture

*Recommended Preparation: eligibility for English 1A*

*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 280*****Exercise and Nutrition Programs for Fitness and Weight Management****3 units; 2 hours lecture, 2 hours lab**Recommended Preparation: eligibility for English A and 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, and tests of muscle function will be conducted to guide exercise and dietary recommendations.

**Physical Education 290*****Personal Fitness Trainer****3 units; 2 hours lecture, 3 hours lab**Recommended Preparation: English 84 and Mathematics 23**Credit, degree applicable**Transfer CSU*

This course provides the scientific foundations and practical experience required by Personal Fitness Trainers for certification by agencies such as American College of Sports Medicine (ACSM), National Strength Coaches Association (NSCA), National Academy of Sports Medicine (NASM), and others. The course is broad-based with topical areas including basic exercise physiology, biomechanics, fitness assessments, exercise prescriptions, fitness training principles, nutrition, weight management and work with special populations. The business aspects of Personal Training are also reviewed.

**Physical Educational Activity Courses****Physical Education 2**

(formerly 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. Strategies for the prevention of injuries will be addressed. Successful completion of the course will result in improved aerobic fitness, increased caloric expenditure, and the ability to construct effective walking programs for continued benefit.

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

**Physical Education 3**

(formerly 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.

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

**Physical Education 4**

(formerly 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.

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

**Physical Education 7**

(formerly Physical Education 7abcd)

***Baseball****1 unit; 3 hours lab**Credit, degree applicable**Transfer CSU, UC\**

Students are introduced to the sport of baseball through instruction and practice. Topics include batting, fielding, and base running skills as well as rules and game strategy. Students will participate in game situations that allow execution of skills and strategies in a competitive environment. A conditioning program specific to the sport will also be utilized.

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

**Physical Education 10**

(formerly Physical Education 1abcd)

***Body Conditioning and Physical Fitness****1 unit; 3 hours lab**Credit, degree applicable**Transfer CSU, UC\**

This course provides students with a fitness foundation through the means of cardiorespiratory endurance training, muscular strength and endurance training, and flexibility exercises. Students assess health-related components of fitness, set fitness goals, and monitor progression. Special emphasis is paid to the design and execution of a personalized exercise prescription.

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

**Physical Education 18**

(formerly Physical Education 14abcd)

**Boxing**

1 unit; 3 hours lab

Credit, degree applicable

Transfer CSU, UC\*

This course examines the skills, rules, etiquette, and strategies for boxing. Students will utilize correct body positioning and footwork as well as the principles and mechanics of punches and defenses. The training aspects of boxing as well as conditioning and fitness strategies will also be covered.

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

**Physical Education 47**

(formerly 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 course will facilitate critical thinking and problem solving skills related to rock climbing.

*Note: Students pay fees for rock climbing equipment.*

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

**Physical Education 54**

(formerly 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.

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

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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 74**

(formerly Physical Education 74abcd)

**Soccer**

1 unit; 3 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.

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

**Physical Education 135abcd****Sport-Specific, Periodized Training for Athletes**

1 unit; 3 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC\*

Students will engage in physical conditioning that is specific to their sport. Training will be periodized with changes in training variables occurring at prescribed intervals and phases of training. Athletes' strengths and weaknesses in performing their sport, will be assessed; injury risk will be identified. Test results, athlete goals, and coaches' input will be used to develop individual training programs to optimize physical conditioning and reduce risk of injury during any phase of the athlete's training.

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

**Physical Education 204**

(formerly Physical Education 204abcd)

**Badminton**

1 unit; 3 hours lab

Credit, degree applicable

Transfer CSU, UC\*

This course provides instruction and practice in the skills of badminton for the beginner to the advanced player. Progressions of skills include serving, clears, net shots, smash and drive. Rules, strategy and etiquette will be covered. Opportunities for singles and doubles competition in tournament play is included in the course.

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

**Physical Education 208**

(formerly Physical Education 208abcd)

**Bowling**

1 unit; 3 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 bowling lanes, shoes, and bowling ball. Students must furnish their own transportation to and from the bowling alley.*

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

**Physical Education 220**

(formerly 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.

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

**Physical Education 221**

(formerly Physical Education 221abcd)

**Combative Arts and Self Defense**

1 unit; 3 hours lab

Credit, degree applicable

Transfer CSU, UC\*

This course provides instruction and practice in the application of combative arts for use in self-defense. Techniques presented will include various strikes, punches, kicks and ground defense strategies. Defense against the headlock, bear hug, chokes and confrontational situations will also be practiced. Physical conditioning relative to performing self-defense techniques will be emphasized. Prevention of training related injuries will be addressed through proper warm up and stretching.

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

**Physical Education 224**

(formerly Physical Education 224abcd)

**Golf**

1 unit; 3 hours lab

Credit, degree applicable

Transfer CSU, UC\*

This course provides instruction and practice in the skills of golf for the beginner, intermediate or advanced golfer. Grip, stance, swing development and putting are taught along with the rules, strategy and etiquette of the game. Instruction and practice will be on campus and at a local course.

*Note: Student will pay a user fee for each class meeting for 3-par (short course). Student must provide own transportation to and from the golf course.*

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

**Physical Education 240**

(formerly Physical Education 240abcd)

**Beginning Swimming**

1 unit; 3 hours lab

Credit, degree applicable

Transfer CSU, UC\*

This course is designed for the beginner swimmer. Instruction and practice will emphasize the fundamentals and stroke mechanics of freestyle, backstroke, elementary backstroke, and sidestroke. Beginning diving skills and treading water along with basic water safety and rescues will be demonstrated and practiced.

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

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

**Physical Education 241**

(formerly Physical Education 241abcd)

**Intermediate/Advanced Swimming**

1 unit; 3 hours lab

Prerequisite: Physical Education 240 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 pass/no pass option.*

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

**Physical Education 244**

(formerly Physical Education 244abcd)

**Springboard Diving**

1 unit; 3 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.

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

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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 245**

(formerly Physical Education 245abcd)

**Water Aerobics**

1 unit; 3 hours lab

Credit, degree applicable

Transfer CSU, UC\*

This course provides instruction on aerobic conditioning done in water. Emphasis is placed on cardiorespiratory endurance, flexibility, muscular strength, and endurance.

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

**Physical Education 247**

(formerly 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 only offered in the fall semester.

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

**Physical Education 248**

(formerly 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 only offered in the spring semester.

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

**Physical Education 249**

(formerly 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, breaststroke, and butterfly).

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

**Physical Education 250**

(formerly Physical Education 250abcd)

**Techniques of Surfboard Riding**

1 unit; 3 hours lab

Prerequisite: Physical Education 240 with a minimum grade of C or equivalent

Enrollment Limitation: must be able to swim 300 yards and tread water for three minutes

Credit, degree applicable

Transfer CSU, UC\*

This course offers instruction in handling of surfboards and practice of safe riding in the surf. Topics such as ocean safety, hazards, currents, tides, weather conditions, wave selection, surfing etiquette, board and wetsuit selection, and paddle technique will be emphasized.

Note: Students may furnish their own surfboards and protective wetsuits to off-campus sites at local beaches. Surfboards and wetsuits are also available for rent on a daily basis.

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

**Physical Education 251**

(formerly 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.

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

**Physical Education 253**

(formerly Physical Education 253abcd)

**Volleyball**

1 unit; 3 hours lab

Credit, degree applicable

Transfer CSU, UC\*

This course provides instruction and practice in the skills of volleyball. Skill progressions of serving, passing, setting, spiking, digging and blocking are taught. Game strategies as applied to two person, four person and six person teams will be covered. Offensive and defensive systems as well as formations and line-ups are included. Tournaments are also included in the course, allowing the students to execute the skills in a competitive environment. The rules of both indoor and the outdoor games will be covered. Specific conditioning for the game of volleyball is also incorporated.

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

**Physical Education 254**

(formerly Physical Education 300abcd)

**Aerobic Fitness**

1 unit; 3 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.

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

**Physical Education 255****Beach Volleyball**

1 unit; 3 hours lab

Credit, degree applicable

Transfer CSU

This course provides instruction, strategies and practice of skills in sand volleyball. The course is designed to develop fundamental and advanced skills, knowledge of rules, team strategies and desire for future participation during leisure times.

**Physical Education 257**

(formerly 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.

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

**Physical Education 258****Power Vinyasa Yoga**

1 unit; 3 hours lab

Recommended Preparation: Physical Education 257

Credit, degree applicable

Transfer CSU, UC\*

This course is a challenging physical yoga practice designed to build significant strength, endurance, concentration, as well as flexibility. It is an athletic form of asana that appeals to students who want to learn how to take their fitness to the next level by practicing yoga.

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

**Physical Education 259****Circuit Training**

1 unit; 3 hours lab

Credit, degree applicable

Transfer CSU, UC\*

This course focuses on the concept of circuit training: a sequence of exercises performed with minimal rest periods between exercise stations. Emphasis is placed on the development of cardiorespiratory endurance, muscular endurance, core conditioning and body composition. Assessments of fitness components will be used to develop exercise prescriptions.

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

**Physical Education Intercollegiate Athletic Courses****Physical Education 5abc****Men's Intercollegiate Baseball Team**

3 units; 10 hours lab

Enrollment Limitation: tryout (high school varsity experience or equivalent skill)

Credit, degree applicable

Transfer CSU, UC\*

This course provides instruction, training, and practice in the advanced techniques of baseball and the opportunity for intercollegiate competition. Students will compete against conference schools and other colleges.

Note: This course is only offered in the spring semester.

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

**Physical Education 6abc****Off-Season Training For Men's Intercollegiate Baseball Team**

1 unit; 3 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC\*

This course provides instruction and practice in the advanced techniques of baseball. All students will engage in an off-season program emphasizing instruction, game tactics, skill development, strength training, and conditioning.

Note: This course is offered in the fall semester and summer session only.

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

**Physical Education 15abc****Men's Intercollegiate Basketball Team**

3 units; 10 hours lab

Enrollment Limitation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC\*

This course provides instruction, training and practice in the advanced techniques of basketball and the opportunity for intercollegiate competition. Student athletes will compete against conference schools and other colleges.

*Note: This course is only offered in the fall semester.*

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

**Physical Education 16abc****Off-Season Training for Men's Intercollegiate Basketball Team**

1 unit; 3 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC\*

This course provides instruction and practice in the advanced techniques of basketball. All students will engage in an off-season program emphasizing instruction, skill development, strength training, and conditioning.

*Note: This course is offered in the spring semester and summer session only.*

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

**Physical Education 20abc****Intercollegiate Cross Country Teams**

3 units; 10 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC\*

This course provides instruction and training in the exercise techniques and principles required for successful development in cross country distance running and the opportunity for intercollegiate competition. Student athletes will compete against conference schools and other colleges and universities.

*Note: This course is only offered in the fall semester.*

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

**Physical Education 21abc****Off-Season Training for Intercollegiate Cross Country Teams**

1 unit; 3 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC\*

This course provides instruction and training in the exercise techniques and principles required for successful development in cross country distance running and intercollegiate competition. All students will engage in an off-season program emphasizing instruction, skill development, strength training, and conditioning.

*Note: This course is offered in the spring semester and summer session only.*

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

**Physical Education 35abc****Men's Intercollegiate Football Team**

3 units; 10 hours lab

Enrollment Limitation: 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. Student athletes will compete against conference schools and other colleges.

*Note: This course is only offered in the fall semester.*

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

**Physical Education 36abc****Off-Season Training for Men's Intercollegiate Football Team**

1 unit; 3 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC\*

This course provides instruction, training, and practice in the advanced techniques of football. All students will engage in an off-season program emphasizing instruction, skill development, strength training, and conditioning.

*Note: This course is offered in the spring semester and summer session only.*

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

**Physical Education 45abc****Men's Intercollegiate Golf Team**

3 units; 10 hours lab

Enrollment Limitation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC\*

This course provides instruction and practice in the advanced techniques of golf and the opportunity for intercollegiate competition. Student athletes will compete against conference schools and other colleges.

*Note: This course is only offered in the spring semester.*

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

**Physical Education 46abc****Off-Season Training for Men's Intercollegiate Golf Team**

1 unit; 3 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC\*

This course provides instruction, training, and practice in the advanced techniques of golf. All students will engage in an off-season program emphasizing instruction, skill development, strength training, and conditioning.

*Note: This course is offered in the fall semester and summer session only.*

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

**Physical Education 57abc****Intercollegiate Swimming Teams**

3 units; 10 hours lab

*Recommended Preparation: high school varsity experience or equivalent skill*

*Credit, degree applicable*

*Transfer CSU, UC\**

This course provides competitive swim training and intercollegiate competition. Students will engage in a program stressing skill development, strength training, cardiovascular conditioning, and competition.

*Note: This course is only offered in the spring semester.*

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

**Physical Education 58abc****Off-Season Training for Intercollegiate Swimming Teams**

1 unit; 3 hours lab

*Recommended Preparation: high school varsity experience or equivalent skill*

*Credit, degree applicable*

*Transfer CSU, UC\**

This course provides instruction and practice in the advanced techniques of swimming. Students will engage in skill development and swim conditioning related to competitive swimming.

*Note: This course is offered in the fall semester and summer session only.*

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

**Physical Education 60abc****Women's Intercollegiate Soccer Team**

3 units; 10 hours lab

*Enrollment Limitation: high school varsity experience or equivalent skill*

*Credit, degree applicable*

*Transfer CSU, UC\**

This course provides instruction, training, and practice in the advanced techniques of soccer and the opportunity for intercollegiate competition. Student athletes will compete against conference schools and other colleges.

*Note: This course is only offered in the fall semester.*

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

**Physical Education 61abc****Off-Season Training for Women's****Intercollegiate Soccer Team**

1 unit; 3 hours lab

*Recommended Preparation: high school varsity experience or equivalent skill*

*Credit, degree applicable*

*Transfer CSU, UC\**

This course provides instruction and practice in the advanced techniques of soccer. All students will engage in an off-season program emphasizing instruction, skill development, strength training, and conditioning.

*Note: This course is offered in the spring semester and summer session only.*

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

**Physical Education 65abc****Men's Intercollegiate Tennis Team**

3 units; 10 hours lab

*Enrollment Limitation: tryout (high school varsity experience or equivalent skill)*

*Credit, degree applicable*

*Transfer CSU, UC\**

This course provides instruction, training, and practice in the advanced techniques of tennis and the opportunity for intercollegiate competition. Student athletes will compete against conference schools and other colleges.

*Note: This course is only offered in the spring semester.*

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

**Physical Education 66abc****Off-Season Training for Men's****Intercollegiate Tennis Team**

1 unit; 3 hours lab

*Recommended Preparation: high school varsity experience or equivalent skill*

*Credit, degree applicable*

*Transfer CSU, UC\**

This course provides instruction, training, and practice in the advanced techniques of tennis. All students will engage in an off-season program emphasizing instruction, skill development, strength training, and conditioning.

*Note: This course is offered in the fall semester and summer session only.*

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

**Physical Education 70abc****Men's Intercollegiate Soccer Team**

3 units; 10 hours lab

*Recommended Preparation: high school varsity experience or equivalent skill*

*Credit, degree applicable*

*Transfer CSU, UC\**

This course provides practice and instruction in the advanced techniques of soccer leading to intercollegiate competition with member schools of the South Coast Conference and other colleges.

*Note: This course is only offered in the fall semester.*

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

**Physical Education 71abc****Off-Season Training for Men's****Intercollegiate Soccer Team**

1 unit; 3 hours lab

*Recommended Preparation: high school varsity experience or equivalent skill*

*Credit, degree applicable*

*Transfer CSU, UC\**

This course is designed for off-season soccer training. Students will engage in an off-season program stressing instruction, skill development, strength training, and cardiovascular conditioning.

*Note: This course is offered in the spring semester and summer session only.*

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

**Physical Education 75abc****Intercollegiate Track and Field Teams**

3 units; 10 hours lab

*Recommended Preparation: high school varsity experience or equivalent skill**Credit, degree applicable**Transfer CSU, UC\**

This course provides instruction, training, and practice in the advanced techniques of track and field. Students will have the opportunity for intercollegiate competition and will compete against conference schools and other colleges.

*Note: This course is only offered in the spring semester.**\*Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.***Physical Education 76abc****Off-Season Training for****Intercollegiate Track and Field Teams**

1 unit; 3 hours lab

*Recommended Preparation: high school varsity experience or equivalent skill**Credit, degree applicable**Transfer CSU, UC\**

This course provides instruction and practice in the advanced techniques of track and field. All students will engage in an off-season program emphasizing instruction, skill development, strength training, and conditioning.

*Note: This course is offered in the fall semester and summer session only.**\*Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.***Physical Education 80abc****Men's Intercollegiate Volleyball Team**

3 units; 10 hours lab

*Recommended Preparation: high school varsity experience or equivalent skill**Credit, degree applicable**Transfer CSU, UC\**

This course provides instruction and practice in the advanced techniques of men's volleyball and the opportunity for intercollegiate competition. Students may compete with member schools of the Western States Conference and other colleges.

*Note: This course is only offered in the spring semester.**\*Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.***Physical Education 81abc****Off-Season Training for Men's****Intercollegiate Volleyball Team**

1 unit; 3 hours lab

*Recommended Preparation: high school varsity experience or equivalent skill**Credit, degree applicable**Transfer CSU, UC\**

This course provides instruction and practice in the advanced techniques of men's volleyball. Emphasis is placed on advanced skill training, offensive and defensive systems, game strategy, and specific conditioning for volleyball.

*Note: This course is offered in the fall semester and summer session only.**\*Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.***Physical Education 85abc****Men's Intercollegiate Water Polo Team**

3 units; 10 hours lab

*Recommended Preparation: high school varsity experience or equivalent skill**Credit, degree applicable**Transfer CSU, UC\**

This course provides instruction, training, and practice in the advanced techniques of water polo and the opportunity for intercollegiate competition. Student athletes will compete against conference schools and other colleges.

*Note: This course is only offered in the fall semester.**\*Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.***Physical Education 86abc****Off-Season Training for Men's****Intercollegiate Water Polo Team**

1 unit; 3 hours lab

*Recommended Preparation: high school varsity experience or equivalent skill**Credit, degree applicable**Transfer CSU, UC\**

This course provides instruction and practice in the advanced techniques of water polo. All students will engage in an off-season program emphasizing instruction, skill development, strength training, and conditioning.

*\*Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.***Physical Education 87abc****Women's Intercollegiate Water Polo Team**

3 units; 10 hours lab

*Recommended Preparation: high school varsity experience or equivalent skill**Credit, degree applicable**Transfer CSU, UC\**

This course provides instruction and practice in advanced water polo techniques. Training format will be designed to develop endurance, strength, individual skills, and team skills specific to the sport of water polo. A variety of drills will encourage skill acquisition and foster coordinated team play. Game theory will engender an understanding of team play and the role each individual contributes to seamless team unity. Conditioning will enable the athletes to play the game at a high performance level. 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 only offered in the fall semester.**\*Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.*


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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 105abc****Women's Intercollegiate Basketball Team**

3 units; 10 hours lab

Enrollment Limitation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC\*

This course provides instruction, training, and practice in the advanced techniques of basketball and the opportunity for intercollegiate competition. Student athletes will compete against conference schools and other colleges.

*Note: This course is only offered in the fall semester.*

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

**Physical Education 106abc****Off-Season Training for Women's****Intercollegiate Basketball Team**

1 unit; 3 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC\*

This course provides instruction and practice in the advanced techniques of basketball. All students will engage in an off-season program emphasizing instruction, skill development, strength training, and conditioning.

*Note: This course is offered in the spring semester and summer session only.*

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

**Physical Education 110abc****Women's Intercollegiate Volleyball Team**

3 units; 10 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC\*

This course provides instruction and practice in the advanced techniques of women's volleyball. Students will compete against member schools of the South Coast Conference and other colleges.

*Note: This course is only offered in the fall semester.*

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

**Physical Education 111abc****Off-Season Training for Women's****Intercollegiate Volleyball Team**

1 unit; 3 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC\*

This course provides instruction and practice in the advanced techniques of women's volleyball. Emphasis is placed on advanced skill training. Offensive and defensive systems, game strategy, and specific conditioning for volleyball are incorporated.

*Note: This course is offered in the spring semester and summer session only.*

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

**Physical Education 115abc****Women's Intercollegiate Tennis Team**

3 units; 10 hours lab

Enrollment Limitation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC\*

This course provides instruction, training, and practice in the advanced techniques of tennis and the opportunity for intercollegiate competition. Student athletes will compete against conference schools and other colleges.

*Note: This course is only offered in the spring semester.*

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

**Physical Education 116abc****Off-Season Training for Women's****Intercollegiate Tennis Team**

1 unit; 3 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC\*

This course provides instruction, training, and practice in the advanced techniques of tennis. All students will engage in an off-season program emphasizing instruction, skill development, strength training, and conditioning.

*Note: This course is offered in the fall semester and summer session only.*

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

**Physical Education 120abc****Women's Intercollegiate Softball Team**

3 units; 10 hours lab

Enrollment Limitation: tryout (high school varsity experience or equivalent skill)

Credit, degree applicable

Transfer CSU, UC\*

This course provides instruction, training, and practice in the advanced techniques of softball and the opportunity for intercollegiate competition. Students will compete against conference schools and other colleges.

*Note: This course is only offered in the spring semester.*

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

**Physical Education 121abc****Off-Season Training for Women's****Intercollegiate Softball Team**

1 unit; 3 hours lab

Recommended Preparation: high school varsity experience or equivalent skill

Credit, degree applicable

Transfer CSU, UC\*

This course provides instruction and practice in the advanced techniques of softball. All students will engage in an off-season program emphasizing skill development, conditioning, and strategies of the game.

*Note: This course is offered in the fall semester and summer session only.*

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

**Physical Education 132abc****Women's Intercollegiate Badminton Team**

3 units; 10 hours lab

*Recommended Preparation (high school varsity experience or equivalent skill)**Credit, degree applicable**Transfer CSU, UC\**

This course provides instruction, training, and practice in the advance techniques of badminton and the opportunity for intercollegiate competition. Student athletes will compete against conference schools and other colleges.

*Note: This course is only offered in the spring semester.**\*Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.***Physical Education 133abc****Off-Season Training for Women's****Intercollegiate Badminton Team**

1 unit; 3 hours lab

*Recommended Preparation: high school varsity or equivalent skill**Credit, degree applicable**Transfer CSU, UC\**

This course is open to team candidates and athletes for off-season badminton training. All participants will engage in an off-season program stressing instruction, skill development, strength training and cardiovascular conditioning.

*Note: This course is only offered in the fall semester.**\*Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.***Physical Education 140abc****Intercollegiate Sand Volleyball Team**

3 units; 10 hours lab

*Recommended Preparation: high school varsity experience or equivalent skill**Credit, degree applicable**Transfer CSU, UC\**

This course provides instruction, training and practice in the advanced techniques of sand volleyball and the opportunity for intercollegiate competition. Student athletes will compete against member schools in their designated conference and against other colleges.

*Note: This course is only offered in the spring semester.**\*Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.***Physical Education 233**

(formerly Physical Education 233abc)

**Pep Squad and Cheer**

1 unit; 3 hours lab

*Recommended Preparation: high school varsity cheerleading experience or equivalent skill**Credit, degree applicable**Transfer CSU*

This course is designed for aspiring cheerleaders who will perform choreographed sport-related cheers, dance and stunting routines. Synchronization of technical dance and gymnastic skills associated with enthusiastic cheerleading will be performed in class. Physical conditioning and spotting techniques will enhance skills and promote safety.

*Note: This course is only offered in the fall semester.***Physical Education 234ab**

(formerly Physical Education 234abcd)

**Pep Squad and Cheer Competition**

1 unit; 3 hours lab

*Prerequisite: Physical Education 233 with a minimum grade of C or equivalent**Credit, degree applicable**Transfer CSU, UC\**

This cheerleading course is designed for preparation for intercollegiate competition against other community colleges. Students will work on personal and team skill development and choreograph cheers, dance and stunting routines. Physical fitness is implemented to enhance competition routines and to reduce the risk of injury.

*Note: This course is only offered in the spring semester.**\*Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.***Physical Education Adapted Activity Courses****Physical Education 400**

(formerly 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, flexibility, muscle endurance, muscle strength, and cardiorespiratory endurance will be discussed. Training principles with each component of fitness will be practiced with an understanding of the physical and health benefits of exercise.

*Note: Letter grade or pass/no pass option.**\*Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.***Physical Education 401**

(formerly Physical Education 401abcd)

**Adapted Strength Training**

1 unit; 3 hours lab

*Credit, degree applicable**Transfer CSU, UC\**

This course is designed for students with disabilities and provides personalized strength training programs. Fitness terminology, training principles, and benefits from resistance exercise will be discussed. Major muscle groups will be identified with an understanding of their function and application to specific exercises.

*Note: Letter grade or pass/no pass option.**\*Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.*


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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 402**

(formerly Physical Education 402abcd)

**Adapted Swimming and Hydroexercise**

1 unit; 3 hours lab

Credit, degree applicable

Transfer CSU, UC\*

This course is designed for students with disabilities and provides personalized instruction in swimming and hydroexercise. Water safety skills, fundamental swimming strokes, and physical fitness training principles in the water utilizing buoyancy and hydrodynamic resistance will be discussed and practiced.

*Note: Letter grade or pass/no pass option.**\*Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.***Physical Education 404**

(formerly Physical Education 404abcd)

**Adapted Cardiovascular Fitness**

1 unit; 3 hours lab

Credit, degree applicable

Transfer CSU, UC\*

This course is designed for students with disabilities and provides personalized instruction in cardiovascular exercise. Aerobic and/or anaerobic conditioning will be performed with an understanding of monitoring exercise frequency, intensity and duration. Fitness terminology, training principles, and benefits of exercise will be discussed.

*Note: Letter grade or pass/no pass option.**\*Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.***Physical Education 407**

(formerly Physical Education 407abcd)

**Adapted Bowling**

1 unit; 3 hours lab

Credit, degree applicable

Transfer CSU, UC\*

This course is designed for students with disabilities and provides personalized instruction in bowling. Skills, rules, etiquette, scoring, and playing strategies will be discussed. Students will participate in tournament and league play during the semester.

*Note: Letter grade or pass/no pass option.**Note: Students pay a user fee for each class meeting for bowling lanes, shoes, and bowling ball. Students must furnish their own transportation to and from the bowling alley.**\*Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.***Physical Education 409**

(formerly Physical Education 409abcd)

**Adapted Yoga**

1 unit; 3 hours lab

Credit, degree applicable

Transfer CSU, UC\*

This course is designed for students with disabilities and provides personalized instruction in yoga. Modified yoga postures (asanas) and breathing practices are introduced to improve strength, flexibility, balance, and stress reduction. This course will give the student both the knowledge and practice for improved health and greater mind and body awareness.

*Note: Letter grade or pass/no pass option.**\*Note: Some UC transferable courses have credit limitations. For details, see a counselor, the Transfer Center adviser, or the articulation officer.***PHYSICAL SCIENCE****A.S. Degree****Natural Sciences Division**[www.elcamino.edu/academics/naturalsciences](http://www.elcamino.edu/academics/naturalsciences)

The physical science program provides students the opportunity to investigate diverse methods of inquiry by experiencing courses from a cross section of science disciplines. Students will develop critical thinking skills, learn to communicate effectively in writing, and acquire an understanding of major scientific concepts. Through course options, students will use mathematical concepts to solve problems and employ methods of scientific inquiry to understand the world around them. Completion of the degree requirements will prepare students with the skills and resources needed to facilitate academic and career decisions. Competencies will be assessed through regularly scheduled theory and laboratory examinations.

**Course Title****Required Core: 7-10 units**

Complete one of the following two-semester sequences:

CHEM 1A	General Chemistry I (5)
CHEM 1B	General Chemistry II (5)
or	
PHYS 1A	Mechanics of Solids (4)
PHYS 1B	Fluids, Heat and Sound (3)
or	
PHYS 1A	Mechanics of Solids (4)
PHYS 1C	Electricity and Magnetism (4)
or	
PHYS 2A	General Physics (4)
PHYS 2B	General Physics (4)
or	
PHYS 3A	General Physics with Calculus (5)
PHYS 3B	General Physics with Calculus (5)
<b>10-13 units from:</b>	
ASTR 12	Astronomy Laboratory (1)
ASTR 20	The Solar System (3)
or	
ASTR 20H	Honors The Solar System (3)
ASTR 25	Stars and Galaxies (3)
CHEM 4	Beginning Chemistry (5)
CHEM 7A	Organic Chemistry I (5)
CHEM 7B	Organic Chemistry II (5)
CSCI 1	Problem Solving and Program Design Using C++ (4)
GEOL 1	Physical Geology (3)
GEOL 2	History of Planet Earth (3)
GEOL 3	Physical Geology Laboratory (1)
GEOL 4	History of Planet Earth Laboratory (1)
GEOL 15	Natural Disasters (3)
MATH 150	Elementary Statistics with Probability (4)
MATH 180	Pre-Calculus (5)
MATH 190	Single Variable Calculus and Analytic Geometry I (5)

MATH 191	Single Variable Calculus and Analytic Geometry II (5)
MATH 220	Multi-Variable Calculus (5)
MATH 270	Differential Equations with Linear Algebra (5)
PHYS 1C	Electricity and Magnetism (4)
PHYS 1D	Optics and Modern Physics (4)

**Total Units: 20**

### Physical Science 25

#### *Exploring Physical Sciences*

3 units; 2 hour lecture, 4 hours lab

Recommended Preparation: 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.

## 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 Physics Transfer Major

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

## PHYSICS

### AS-T Degree

#### *Natural Sciences Division*

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

The physics program provides students with the ability to use and develop problem solving strategies that apply to physical concepts involving mechanics, thermodynamics, sound, light, electricity and magnetism, and modern physics. Laboratory activities establish a foundation in measurement and analysis techniques necessary to test, understand, and apply physical concepts. Upon completion of the program requirements, students will be prepared to transfer and major in physics. Competency will be assessed by evaluating the student's ability to quantitatively and qualitatively determine the results of physical situations.

The Associate in Science for Transfer (AS-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AS-T are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AS-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AS-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AS-T.

Course	Title
PHYS 1A	Mechanics of Solids (4)
PHYS 1C	Electricity and Magnetism (4)
and	
PHYS 1B	Fluids, Heat and Sound (3)
or	
PHYS 1D	Optics and Modern Physics (4)
MATH 190	Single Variable Calculus and Analytic Geometry I (5)
MATH 191	Single Variable Calculus and Analytic Geometry II (5)
MATH 220	Multi-Variable Calculus (5)

**Total Units: 26-27**

**Physics 1A*****Mechanics of Solids***

4 units; 4 hours lecture, 2 hours lab

*Prerequisite:* One year of high school Physics or Physics 2A and Mathematics 190 with a minimum grade of C in prerequisite or concurrent enrollment

*Credit, degree applicable*

*Transfer CSU, UC\**

This is the first course in a four-semester calculus-based physics sequence designed for students with majors in engineering and the physical sciences. The course focuses on the mechanics of solids, with topics including statics, kinematics, Newton's Laws, energy, power, linear and angular momentum, rotational dynamics, elasticity, simple harmonic motion, and gravitation.

*\*Note: The maximum UC credit allowed for students completing Physics 1A, 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\**

This is the second course in a four-semester calculus-based physics sequence designed for students with majors in engineering and the physical sciences. This course focuses on fluids, thermodynamics, and wave phenomena, with topics including fluids, statics and dynamics, gas laws, heat transfer, engines, the first and second laws of thermodynamics, and sound.

*\*Note: The maximum UC credit allowed for students completing 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 Kirchoff'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***

4 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 the fourth course in four-semester calculus-based physics sequence intended for students entering majors in engineering and the physical sciences. The topics covered include geometric and physical optics, special relativity, quantum mechanics, nuclear physics, and selected topics in modern physics.

*Note: This course is only offered in the spring semester.*

*\*Note: The maximum UC credit allowed for students completing Physics 1A, 1B, 1C, 1D and Physics 2A, 2B and/or Physics 3A, 3B is one series.*

**Physics 2A*****General Physics***

4 units; 3 hours lecture, 3 hours lab

*Prerequisite:* Mathematics 170 with a minimum grade of C or equivalent

*Credit, degree applicable*

*Transfer CSU, UC\**

This course is part of a one-year algebra- and trigonometry-based survey of physics. Topics covered include kinematics, statics, dynamics, momentum, energy, rotation, gravitation and planetary motion, fluids, kinetic theory of gases, and thermodynamics. In addition, the course covers elasticity and vibration, wave motion, interference, standing waves, and sound.

*\*Note: The maximum UC credit allowed for students completing Physics 2A, 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 part of a one-year algebra- and trigonometry-based survey of physics. Topics covered include electric forces and fields, electric energy, electric circuits, magnetism, electromagnetic waves, geometric optics, wave optics, applied optics, relativity, electrons and photons, atomic structure, the nucleus, applied nuclear physics, and particle physics.

*\*Note: The maximum UC credit allowed for students completing Physics 2A, 2B and Physics 1A, 1B, 1C, 1D and/or Physics 3A, 3B is one series.*

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

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**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, fluids, vibration, wave motion, sound, the kinetic theory of gases, and thermodynamics will also be discussed. This course is designed for life science majors requiring a calculus-based physics program.

\*Note: The maximum UC credit allowed for students completing Physics 3A, 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 99**

(formerly 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\*

This course provides special advanced studies in a subject field of Physics not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Physics projects (54 hours per unit).

\*Note: Transfer limitations apply.

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

**Physiology****Physiology 31****Human Physiology**

4 units; 2 hours lecture, 6 hours lab

Prerequisite: Anatomy 32 and Chemistry 20 or 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 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.

#### Course Title

##### Required Core: 3 units

POLI 1 Governments of the United States and California (3)

##### 12 units from:

POLI 2 Introduction to Comparative Politics (3)

POLI 3 Introduction to Principles and Methods of Political Science (3)

POLI 5 Ethnicity in the American Political Process (3)

POLI 6 Civil Rights and Liberties in the United States (3)

POLI 10 Introduction to International Relations (3)

##### 3 units from:

ECON 1 Principles of Economics: Macroeconomics (3)

ECON 2 Principles of Economics: Microeconomics Theory (3)

HIST 101 United States History to 1877 (3)

HIST 102 United States History from 1877 to the Present (3)

HIST 141 History of Modern Civilizations (3)

PHIL 103 Ethics and Society (3)

PHIL 111 History of Ancient and Medieval Philosophy (3)

**Total Units: 18**

### Preparation for the Political Science Transfer Major

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

## POLITICAL SCIENCE

### AA-T 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, intergovernmental relations, international law, and the principal functions of the government of the United States as well as differing political systems. Upon successful program completion, students will be able to identify, explain and critically analyze different theories and political themes underlying contemporary issues and policymaking. The degree prepares students for transfer to a CSU and a political science major. Students will continue studies in government, politics and law. Competencies will be assessed regularly through examinations, essays, projects, and reports.

The Associate in Arts for Transfer (AA-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AA-T are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AA-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AA-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AA-T.

Course	Title
<b>Required Core: 3 units</b>	
POLI 1	Governments of the United States and California (3)
<b>List A: 9-10 units</b>	
POLI 2	Introduction to Comparative Politics (3)
POLI 3	Introduction to Principles and Methods of Political Science (3)
POLI 7	Political Philosophy (3)
POLI 10	Introduction to International Relations (3)
MATH 150	Elementary Statistics with Probability (4)
or	
PSYC 9A	Introduction to Elementary Statistical Methods for the Study of Behavior (4)
or	
SOCI 109	Introduction to Elementary Statistical Methods for the Study of Behavior (4)
<b>List B: 6 units</b>	
<b>Any course from List A not already completed</b>	
ANTH 2	Introduction to Cultural Anthropology (3)
ECON 1	Principles of Economics: Macroeconomics (3)
ECON 2	Principles of Economics: Microeconomics Theory (3)
ESTU 1	Introduction to Ethnic Studies (3)
HIST 101	United States History to 1877 (3)
HIST 102	United States History from 1877 to the Present (3)
POLI 2	Introduction to Comparative Politics (3)
POLI 3	Introduction to Principles and Methods of Political Science (3)
POLI 5	Ethnicity in the American Political Process (3)
POLI 6	Civil Rights and Liberties in the United States (3)
POLI 7	Political Philosophy (3)
POLI 10	Introduction to International Relations (3)
PSYC 5	General Psychology (3)
SOCI 101	Introduction to Sociology (3)
WSTU 1	Introduction to Women's Studies (3)
<b>Total Units: 18-19</b>	

Note: POLI 7 is the same course as PHIL 117.  
Course credit is limited to POLI 7 or PHIL 117.

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

### 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.

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

### 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 7***Political Philosophy**3 units; 3 hours lecture**Recommended Preparation: eligibility for English 1A**Credit, degree applicable**Transfer CSU, UC*

In this course, students will examine political theory as presented in the primary works of major Western thinkers from Plato to Marx. Fundamental issues to be explored include human nature, justice, power, the role of the state, and the legitimate scope of government.

*Note: Political Science 7 is the same course as Philosophy 117.*

**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.

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

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**PRE-ENGINEERING****A.S. Degree***Mathematical Sciences Division**www.elcamino.edu/academics/mathsciences*

The degree is designed for students planning to transfer into an engineering program. The student will acquire the ability to apply principles of mathematics, physics, and chemistry. Competencies will be regularly assessed through problem solving involving differential and integral calculus of one and several variables; differential equations and linear algebra; mechanics of solids, fluids, heat, sound, electricity and magnetism; chemical reactions and chemical equations.

**Preparation for the Pre-Engineering Transfer Major**

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

**PRE-NURSING****A.S. Degree***Health Sciences and Athletics Division**www.elcamino.edu/academics/healthsciences*

This degree is designed for students planning to transfer to a generic nursing program at a university. Upon successful completion of the requirements for the pre-nursing transfer major, students will acquire a foundation in the biological, physical, and social sciences as well as communication skills. This eclectic theory base will provide foundation skills that transfer students will need for practice and advanced education in a baccalaureate program in nursing. Competencies will be assessed through regularly scheduled course examinations.

**Preparation for the Pre-Nursing Transfer Major**

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

**Pre-School Teaching****See Child Development**

## PSYCHOLOGY

### AA-T Degree

#### *Behavioral and Social Sciences Division*

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

The psychology program is designed to provide students with a foundation in the science of psychology. Psychology majors will acquire the ability to survey theories critically, research the major areas of psychology, use descriptive and inferential statistics, design and conduct research, and write reports using analysis, argumentation, and proper psychological style. This major prepares students for career opportunities in fields such as teaching, research, and/or clinical practice. Competencies will be assessed regularly by evaluating student performance on exams, essays, and reports.

The Associate in Arts for Transfer (AA-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AA-T are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AA-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AA-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AA-T.

#### **Course Title**

##### **Required Core: 11 units**

PSYC 5	General Psychology (3)
PSYC 9B	Experimental Methods in the Study of Behavior (4)
MATH 150	Elementary Statistics with Probability (4)
or	
PSYC 9A	Introduction to Elementary Statistical Methods for the Study of Behavior (4)
or	
SOCI 109	Introduction to Elementary Statistical Methods for the Study of Behavior (4)

##### **List A: 3-4 units**

BIOL 10	Fundamentals of Biology (4)
PSYC 7	Physiological Psychology (3)

##### **List B: 6 units**

PSYC 2	Psychology for Effective Living (3)
PSYC 3	Critical Thinking and Psychology (3)
PSYC 8	Social Psychology (3)
PSYC 10	African American Psychology (3)
PSYC 12	Human Sexuality (3)
PSYC 15	Abnormal Psychology (3)
PSYC 16	Lifespan Development (3)
PE 275	Sport Psychology (3)

**Total Units: 20-21**

### 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 73 or 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: Mathematics 150 or 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.

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

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**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 17****Cultural 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 will examine psychological principles, theory, and research through exploration of cultural differences and similarities, both within and across cultures. Topics may include the interplay between culture and developmental processes, cognition, emotion, communication, gender, personality development, psychopathology, and social behavior.

**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 a minimum of twenty-five months in length, after the completion of the program prerequisite classes. The twenty-five months include the academic semesters and clinical internship (taken concurrently). Satisfactory completion of the prescribed course of study qualifies graduates to take both State and National Certification Examinations. The Radiologic Technology Program is accredited by the California State Department of Public Health Services – Radiologic Health Branch (CDPHS-RHB), and the Joint Review Committee on Education in Radiologic Technology (JRCERT).

**Program Prerequisites**

Complete the following courses with a grade point average of 2.25 or better: Anatomy 32 or Anatomy and Physiology 34A, Computer Information Systems 13, English 1A, Mathematics 73 or 80, Physiology 31 or Anatomy and Physiology 34B, Psychology 5, Radiologic Technology A.

**Acceptance into Radiologic Technology Program**

New students are admitted to the program once per year, in the fall semester. Acceptance at El Camino College does not guarantee entrance into the Radiologic Technology Program. Prior to filing an application, transcripts of all academic work completed must be filed in the Office of Admissions and Records.

The application filing period is once a year, during the spring semester. Student applying to the program will be required to take an entrance exam along with filing an application during the spring semester. The cost of the exam is the responsibility of the student. Additional information about the application process and the application packet is available for download on the Radiologic Technology website.

**Prior to Starting the Program**

Students will be required to attend two mandatory orientation sessions during the summer, before beginning the program in the fall semester. Provisionally accepted students will be required to undergo a complete physical examination, including a TB test. Students must submit a current CPR for BLS provider card, a criminal background check and drug screening clearance as required by the Joint Commission on Accreditation of Health Care Organizations (JCAHO) prior to a guaranteed acceptance to the program, and placement at a clinical education training facility. The student is responsible for the cost of these requirements.

**Program Costs**

Cost of books, uniforms and miscellaneous supplies must be borne by the student and is estimated at approximately \$1,500 for the first year, and approximately \$500 the second year of the program.

Course	Title
RTEC 91	Radiologic Pathology (2)
RTEC 93	Venipuncture and Pharmacology for the Radiologic Technologist (1)
RTEC 104	Clinical Education 1 (1.5)
RTEC 106	Clinical Experience 1 (4)
RTEC 107	Clinical Experience 2 (7)
RTEC 109	Clinical Experience 3 (2.5)
RTEC 111	Fundamentals of Radiologic Technology (4)
RTEC 123	Radiographic Positioning 1A (4)
RTEC 124	Radiographic Positioning 1B (4)
RTEC 217	Clinical Experience 4 (7)
RTEC 218	Clinical Experience 5 (7)
RTEC 233	Radiographic Positioning 2 (3)
RTEC 244	Radiation Physics, Equipment, and Safety (4)
RTEC 255	Advanced Imaging and Special Procedures (4)
MEDT 1	Medical Terminology (3)

**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. A Certificate of Accomplishment will be granted upon completion of the program requirements.

**Radiologic Technology Certificate of Accomplishment**

Course	Title
RTEC 216	Clinical Education 2 (2)
RTEC 220	Clinical Experience 6 (3)
RTEC 328	Clinical Experience 7 (4.5)

**Total Units: 9.5**

**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 Technology courses in which a student has received a D or F grade may be repeated one time and the student may only re-enter the program one time. The JRCERT requires that all students complete the program within three years of their original admission date. This policy is available for review in the Program Director's Office and is published in the Student Handbook. Student academic standing at the time of leaving the program will determine whether academic support courses will be prescribed before re-entry. Students must comply with all conditions of acceptance for re-entry, including submission of a self-evaluation and filing a new application before the student may return. The application points will also be considered when ranking the returning students. The student may be asked to repeat courses previously passed within the program for successful continuance in the program.

**Advanced Standing**

The student with prior training or experience may petition for credit by examination for Radiologic Technology 111 and Radiologic Technology 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

*Prerequisite: Mathematics 23 with a minimum grade of C or qualification by testing (El Camino College Mathematics Placement Test) and assessment; eligibility for English 1A*

*Credit, degree applicable*

*Transfer CSU*

This course provides an introduction to Radiologic Technology as a profession including foundational skills necessary to prepare students planning to enter the Radiologic Technology A.S. Degree Program. Course topics include 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 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 109 and 124 with a minimum grade of C in prerequisite*

*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.

**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\**

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: Transfer limitations apply.*

*Note: The total units earned for Cooperative Work Experience Education may not exceed 16 units.*

**Radiologic Technology 104****Clinical Education 1**

1.5 units; 4.5 hours lab per week to be arranged

*Prerequisite: Radiologic Technology 106, 111 and 123 with a minimum grade of C in prerequisite*

*Credit, degree applicable*

*Transfer CSU*

This course continues the development of clinical skills in the performance of radiographic examinations. Areas of skill development include the upper and lower extremities and radiography of the chest. Emphasis will be placed on radiation protection of the patient, self, and co-workers.

**Radiologic Technology 106****Clinical Experience 1**

4 units; 12 hours lab per week to be arranged

Corequisite: enrollment in Radiologic Technology 111 and Radiologic Technology 123

Enrollment Limitation: admission to the Radiologic Technology Program

Credit, degree applicable

Transfer CSU

This course provides an environment to apply and develop skills learned in patient transportation, hospital policies and procedures, image processing, professional ethics, practical aspects of radiation protection, and introduction to patient positioning.

**Radiologic Technology 107****Clinical Experience 2**

7 units; 21 hours lab per week to be arranged

Prerequisite: Radiologic Technology 106, 111, and 123 with a minimum grade of C in prerequisite

Corequisite: Radiologic Technology 124

Credit, degree applicable

Transfer CSU

This course provides an introduction to the routine radiographic procedures and positioning skills for the performance of upper extremity, lower extremity, thorax, vertebral column, biliary, genitourinary, and gastrointestinal system examinations.

Note: Students must show proof of current Cardiopulmonary Resuscitation (CPR) certification by the American Heart Association or American Red Cross (Health Care Provider/Professional Rescuer) at the first class meeting.

**Radiologic Technology 109****Clinical Experience 3**

2.5 units; 7.5 hours lab to be arranged

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 performance of radiographic examinations to include the chest, abdomen, upper and lower extremities, vertebral column, bony thorax, pelvis, gastrointestinal, and urinary systems. Emphasis will be placed on contrast media examinations and radiation protection of the patient, self, and co-workers, with the use of fluoroscopy and mobile radiographic equipment. Special imaging consideration for the pediatric and geriatric patients, the acutely ill, surgical and trauma patients will also be covered.

**Radiologic Technology 111****Fundamentals of Radiologic Technology**

4 units; 3 hours lecture, 3 hours lab

Prerequisite: Radiologic Technology A with a minimum grade of C

Corequisite: Radiologic Technology 106 and Radiologic Technology 123

Enrollment Limitation: admission to the Radiologic Technology Program

Credit, degree applicable

Transfer CSU

This course is a combination of lab and lecture that explores the basic concepts and theories of radiologic science, technology, equipment, and physics in the field of radiology. The course content includes the study of matter, varying forms of energy, and different forms of radiation in radiology. Students will learn all of the essential equipment, how it functions, and proper-safe use in radiologic technology. The lab component of the course further reinforces the concepts taught in the didactic course.

**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, upper and lower extremities are introduced along with the use of various radiographic devices. Laboratory practice, radiographic image analysis and topographical anatomy are presented as they apply in the production of optimum radiographic examinations.

**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 shoulder, bony thorax, pelvis, vertebral column, contrast media, gastrointestinal system, genitourinary system and biliary systems. Special imaging considerations for the pediatric and geriatric patients, the acutely ill, surgical patients, and trauma patients will also be covered. Radiographic technique, anatomy, specialized mobile and fluoroscopic equipment, patient safety, and radiation protection will be included. Laboratory practice, radiographic image analysis and critique, and topographical anatomy are presented as they apply in the production of optimum radiographic examinations.

**Radiologic Technology 216***Clinical Education 2**2 units; 6 hours lab per week to be arranged**Prerequisite: Radiologic Technology 217 with a minimum grade of C**Credit, degree applicable**Transfer CSU*

This course provides continued development of clinical skills in the performance of radiographic examinations to include the chest, abdomen, upper and lower extremities, vertebral column, bony thorax, pelvis, cranium and facial bones. Emphasis will be placed on advanced contrast examinations and radiation protection of the patient, self, and co-workers, especially with the use of fluoroscopy and mobile radiographic equipment. Special imaging considerations for the pediatric and geriatric patients, the acutely ill, surgical and trauma patients will also be covered.

**Radiologic Technology 217***Clinical Experience 4**7 units; 21 hours lab per week to be arranged**Prerequisite: Radiologic Technology 104 and 109 with a minimum grade of C**Corequisite: 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 per week 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 220***Clinical Experience 6**3 units; 9 hours lab per week to be arranged**Prerequisite: Radiologic Technology 218 with a minimum grade of C**Credit, degree applicable**Transfer CSU*

This course continues the development of clinical skills in the performance of radiographic examinations, with a special emphasis in specialized radiography, new modalities and age-specific competencies. Advanced clinical practice experiences are designed to provide competent performance of radiologic imaging. Students will perform independently, with appropriate supervision to assess their skills for employability. The course emphasizes completions of all mandatory, elective and final clinical performance evaluations.

**Radiologic Technology 233***Radiographic Positioning 2**3 units; 2 hours lecture, 3 hours lab**Prerequisite: Radiologic Technology 109 and 124 with a minimum grade of C in prerequisite**Corequisite: Radiologic Technology 217 and 244**Credit, degree applicable**Transfer CSU*

In this course, students will learn additional principles of radiographic positioning. Emphasis is placed on those procedures involving the cranium. Topics will include radiographic technique, anatomy, specialized equipment, patient safety, and radiation protection. Special imaging modalities and techniques will be discussed. The most common cranium pathologies will be demonstrated and identified on radiographic images.

**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 continues with the study of radiation and radiological physics. Additional subjects covered are: the operation of medical x-ray and fluoroscopy units, the effects of radiation in humans, and the principles of radiation protection as applied in medical radiography. An introduction to health physics instrumentation, and radiation control regulations, with an emphasis on radiation health and safety will be discussed along with the principles of digital imaging.

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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 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 placed on anatomy, pathology, positioning and patient care for specialized radiographic procedures. Newer imaging modalities are explored, along with cross section anatomy. Advanced modalities such as CT, MRI, Nuclear Medicine, PET, Ultrasound and Radiation Therapy are covered. An in-depth exploration of digital imaging fluoroscopy and radiation safety principles are also reviewed.

**Radiologic Technology 328***Clinical Experience 7**4.5 units; 3 hours lecture, 32 hours lab to be arranged (6 week course)**Prerequisite: Radiologic Technology 220 with a minimum grade of C**Credit, degree applicable**Transfer CSU*

This course continues the development of clinical skills in radiography with emphasis in specialized radiography and new modalities. Advanced clinical practice experiences are designed to provide competent performance of radiologic imaging, using sequential development, critical analysis, and evaluation in the performance of radiologic procedures and patient assessment and care. Students perform independently with appropriate supervision to assess their skills for employability. This course also reviews the entire radiologic technology curriculum, following the American Registry of Radiologic Technologists (ARRT) examination outline, to prepare the students for State and National Certification examinations.

**REAL ESTATE****A.A. Degree and Certificates of Achievement***Business Division**www.elcamino.edu/academics/business*

The degree or certificates are designed to provide students with competencies to enter careers in residential and commercial real estate appraisal, escrow, exchange, development, investment, leasing, property management, sales, and title insurance. The program meets legislatively mandated education for the California Bureau of Real Estate (BRE) salesperson and broker license exams as well as the California Bureau of Real Estate Appraisers (BREA) license exam. Courses are approved by the BRE and BREA for basic and continuing education, including computer applications and Uniform Standards of Professional Appraisal Practice (USPAP). Competencies are assessed using projects and exams.

**Mortgage Brokerage Option:**

<b>Course</b>	<b>Title</b>
<b>Required Core: 18-19 units</b>	
RE 11	Real Estate Principles (3)
RE 13	Real Estate Practice (3)
RE 14A	Real Estate Finance I (3)
RE 31	Mortgage Loan Brokering and Lending (3)
RE 40	Real Estate Appraisal (3)
BUS 1A	Financial Accounting (4)
or	
RE 16	Real Estate Economics (3)
<b>6 units from:</b>	
RE 12A	Legal Aspects of Real Estate (3)
RE 19	Real Property Management (3)
RE 26	Escrows (3)
RE 14B	Advanced Real Estate Finance (3)
or	
BUS 17	Personal Finance (3)
<b>3-4 units from:</b>	
BUS 5A	Income Tax Accounting (4)
BUS 15	Business Mathematics (3)
BUS 28	Written Business Communications (3)
<b>Total Units: 27-29</b>	

**Real Estate Option:****Course Title****Required Core: 18-19 units**

RE 11	Real Estate Principles (3)
RE 12A	Legal Aspects of Real Estate (3)
RE 13	Real Estate Practice (3)
RE 14A	Real Estate Finance I (3)
RE 40	Real Estate Appraisal (3)
RE 16	Real Estate Economics (3)

or

BUS 1A	Financial Accounting (4)
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**6 units from:**

LAW 5	Business Law (3)
RE 14B	Advanced Real Estate Finance (3)
RE 19	Real Property Management (3)
RE 21	Real Estate Investments (3)
RE 26	Escrows (3)
RE 31	Mortgage Loan Brokering and Lending (3)
RE 41	Advanced Real Estate Appraisal (3)

**Total Units: 24-25****Real Estate Appraisal Option:****Course Title****Required Core: 15 units**

RE 11	Real Estate Principles (3)
RE 14A	Real Estate Finance I (3)
RE 16	Real Estate Economics (3)
RE 40	Real Estate Appraisal (3)
RE 41	Advanced Real Estate Appraisal (3)

**6 units from:**

RE 14B	Advanced Real Estate Finance (3)
RE 19	Real Property Management (3)
RE 21	Real Estate Investments (3)
RE 31	Mortgage Loan Brokering and Lending (3)

**6 units from:**

ARCH 150A	Construction Documentation I (3)
BUS 15	Business Mathematics (3)
BUS 28	Written Business Communications (3)
CIS 13	Computer Information Systems (3)

**Total Units: 27****Certificates of Achievement**

A Certificate of Achievement will be granted upon completion of all program requirements. Courses must be completed with a 3.0 (B) average. A minimum of 10 units must be completed at El Camino College.

**Mortgage Loan Brokerage Certificate of Achievement****Course Title****Required Core: 18-19 units**

RE 11	Real Estate Principles (3)
RE 13	Real Estate Practice (3)
RE 14A	Real Estate Finance I (3)
RE 31	Mortgage Loan Brokering and Lending (3)
RE 40	Real Estate Appraisal (3)
RE 16	Real Estate Economics (3)

or

BUS 1A	Financial Accounting (4)
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**6 units from:**

RE 12A	Legal Aspects of Real Estate (3)
RE 19	Real Property Management (3)
RE 26	Escrows (3)
RE 14B	Advanced Real Estate Finance (3)

or

BUS 17	Personal Finance (3)
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**3-4 units from:**

BUS 5A	Income Tax Accounting (4)
BUS 15	Business Mathematics (3)
BUS 28	Written Business Communications (3)

**Total Units: 27-29****Real Estate Certificate of Achievement****Course Title****Required Core: 18-19 units**

RE 11	Real Estate Principles (3)
RE 12A	Legal Aspects of Real Estate (3)
RE 13	Real Estate Practice (3)
RE 14A	Real Estate Finance I (3)
RE 40	Real Estate Appraisal (3)
RE 16	Real Estate Economics (3)

or

BUS 1A	Financial Accounting (4)
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**6 units from:**

LAW 5	Business Law (3)
RE 14B	Advanced Real Estate Finance (3)
RE 19	Real Property Management (3)
RE 21	Real Estate Investments (3)
RE 26	Escrows (3)
RE 31	Mortgage Loan Brokering and Lending (3)
RE 41	Advanced Real Estate Appraisal (3)

**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 Appraisal Certificate of Achievement****Course Title****Required Core: 15 units**

RE 11	Real Estate Principles (3)
RE 14A	Real Estate Finance I (3)
RE 16	Real Estate Economics (3)
RE 40	Real Estate Appraisal (3)
RE 41	Advanced Real Estate Appraisal (3)

**6 units from:**

RE 14B	Advanced Real Estate Finance (3)
RE 19	Real Property Management (3)
RE 21	Real Estate Investments (3)
RE 31	Mortgage Loan Brokering and Lending (3)

**6 units from:**

ARCH 150A	Construction Documentation I (3)
BUS 15	Business Mathematics (3)
BUS 28	Written Business Communications (3)
CIS 13	Computer Information Systems (3)

**Total Units: 27**

For Gainful Employment program information, please visit [www.elcamino.edu/academics/business/realstate](http://www.elcamino.edu/academics/business/realstate)

**Real Estate 11****Real Estate Principles**

3 units; 3 hours lecture

Recommended Preparation: eligibility for English 1A

Credit, degree applicable

Transfer CSU

This course covers various aspects of real estate, including an introduction to legal aspects, title and escrow procedures, property management, appraisal, finance, and the ownership of real property. Students develop basic vocabulary and test-taking skills in partial preparation for state examination for a California Bureau of Real Estate (BRE) license.

*Note: The California Bureau of Real Estate (BRE) requires completion of this course prior to taking the California Real Estate Salesperson Examination and has approved this course for credit for the BRE broker's license requirement.*

**Real Estate 12A****Legal Aspects of Real Estate**

3 units; 3 hours lecture

Recommended Preparation: English 82

Credit, degree applicable

Transfer CSU

This course provides instruction on the buying, selling, and management of real property. Students study California property law, community property, liens, sales contracts, escrow, commissions, transfers, licensing regulations, and public policy.

*Note: The California Bureau of Real Estate (BRE) has approved this course as one of the elective courses for the salesperson license, in addition to the required courses of Real Estate Principles and Real Estate Practice. The California Bureau of Real Estate (BRE) has approved this course as one of the required courses for the real estate broker license.*

**Real Estate 13****Real Estate Practice**

3 units; 3 hours lecture

Recommended Preparation: Real Estate 11 or current enrollment; or California Bureau of Real Estate (BRE) license or equivalent experience

Credit, degree applicable

Transfer CSU

In this course, students will be introduced to the standard forms used in the real estate industry and will learn techniques necessary to close a residential real estate transaction. Students will develop skills in partial preparation for the state examination for a California Bureau of Real Estate (BRE) license, with emphasis placed on advertising, listings, finance, appraisal, escrow and the tax aspects of real property ownership.

*Note: The California Bureau of Real Estate (BRE) requires completion of this course prior to taking the California Real Estate Salesperson Examination and has approved this course for credit for the BRE broker's license requirement.*

**Real Estate 14A****Real Estate Finance I**

3 units; 3 hours lecture

Recommended Preparation: Real Estate 11 or concurrent enrollment; or California Bureau of Real Estate (BRE) 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 Bureau of Real Estate (BRE) as one of the mandatory eight statutorily required college-level courses for the broker license and for the salesperson license, which also requires Real Estate Principles and Real Estate Practice.*

**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 Bureau of Real Estate (BRE) 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 and 40; or California Bureau of Real Estate (BRE) license; or California Bureau of Real Estate Appraisers (BRE) license**Credit, degree applicable**Transfer CSU*

This course provides instruction on the aspects that tie economics and politics to real estate land use. Emphasis is on the factors, which create value in real estate, including urban development, governmental policies and requirements for development, as well as the business and real estate cycles.

*Note: The California Bureau of Real Estate (BRE) has approved this course as one of the elective courses for the salesperson license in addition to the required Real Estate Principles and Real Estate Practice. The California Bureau of Real Estate (BRE) has approved this course as one of the elective courses for the real estate broker license.*

**Real Estate 19****Real Property Management**

3 units; 3 hours lecture

*Recommended Preparation: Real Estate 11 and Real Estate 12A; or California Bureau of Real Estate (BRE) license; or California Bureau of Real Estate Appraisers (BRE) license or equivalent; 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 legal contracts for rental property, physical maintenance, and trust fund accounting fundamentals including security deposits.

*Note: This course is approved by the California Bureau of Real Estate (BRE) as one of the elective courses for the eight statutorily required college-level courses for the broker license and for the salesperson license, which also requires Real Estate Principles and Real Estate Practice.*

**Real Estate 21****Real Estate Investments**

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 Bureau of Real Estate (BRE) has approved this course as one of the elective courses that may be completed for the salesperson license in addition to the required courses of Real Estate Principles and Real Estate Practice. The California Bureau of Real Estate (BRE) has approved this course as one of the elective courses for the real estate broker license. The BRE requires a copy of the college course outline or catalog description along with transcript showing proof of course completion.*

**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 Bureau of Real Estate (BRE) has approved this course as one of the elective courses that may be completed for the salesperson license in addition to the required Real Estate Principles and Real Estate Practice. The California Bureau of Real Estate (BRE) has approved this course as one of the optional courses for the real estate broker license.*

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

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**Real Estate 31*****Mortgage Loan Brokering and Lending****3 units; 3 hours lecture**Recommended Preparation: Real Estate 11 or concurrent enrollment; or California Bureau of Real Estate (BRE) 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 Bureau of Real Estate (BRE) as one of the elective courses for the eight statutorily required college-level courses for the broker license and for the salesperson license, which also requires Real Estate Principles and Real Estate Practice.*

**Real Estate 40*****Real Estate Appraisal****3 units; 3 hours lecture**Recommended Preparation: Real Estate 11 or California Bureau of Real Estate Appraisers (BRE) license; or California Bureau of Real Estate (BRE) broker's license**Credit, degree applicable**Transfer CSU*

This course provides instruction in the valuation principles of real estate appraisal, including architectural styles, types of construction, lot valuation, depreciation, the approaches to value, and appraisal standards and ethics.

*Note: The California Bureau of Real Estate (BRE) has approved this course as one of the optional courses that must be completed within 18 months of conditional salesperson licensure in addition to the required courses of Real Estate Principles and Real Estate Practice. This course is statutorily required for the California real estate broker license. The California Bureau of Real Estate Appraisers (BRE) has approved this course for 54 hours of basic education (BE) credit. BRE has approved this course for 51 hours of continuing education (CE) credit for license renewal provided the student has 90 percent attendance and passes a closed book final exam.*

**Real Estate 41*****Advanced Real Estate Appraisal****3 units; 3 hours lecture**Prerequisite: Real Estate 40 with a minimum grade of C; or California Bureau of Real Estate Appraisers (BRE) license; or California Bureau of Real Estate (BRE) broker license**Credit, degree applicable**Transfer CSU*

This course provides instruction in advanced concepts of the income approach to value process for real property, analyzing operating expenses, capitalization, and depreciation. Students develop proficiency in utilizing residential income and commercial and industrial property appraisal guidelines to create a standard appraisal form. Emphasis is placed on the advanced cost approach valuation, in addition to the Uniform Standards of Professional Appraisal Practice (USPAP) ethics.

*Note: The California Bureau of Real Estate (BRE) has approved this course as one of the elective courses for the real estate broker license. This course is not approved by BRE for the educational requirements for the salesperson license.*

**Real Estate 95***(formerly 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\**

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Real Estate/Business field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

*\*Note: Transfer limitations apply.*

*Note: The total units earned for Cooperative Work Experience Education 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 and Certificate of Accomplishment

*Health Sciences and Athletics Division*  
[www.elcamino.edu/academics/healthsciences](http://www.elcamino.edu/academics/healthsciences)

The recreation program is designed for students desiring to transfer or to obtain entry-level positions in recreation and leisure services. After acquiring the historical, philosophical, and theoretical foundations of recreation, students will apply administrative, leadership, planning, supervision, and counseling skills in diverse commercial, municipal, and camp recreation settings. Competencies will be assessed by evaluating the student's ability to solve problems in recreation and leisure program design and to develop organizational skills in a variety of situations.

#### Course Title

##### Required Core: 14 units

FAID 1	First Aid, Cardiopulmonary Resuscitation (CPR) and Basic Emergency Care (3)
PE 217	Sports Officiating (2)
RECR 207	Introduction to Recreation (3)
RECR 217	Recreational Leadership (3)
RECR 307	Camp Counseling: Leadership and Programming (3)

##### 7-9 units from:

ANAT 30	Essentials of Anatomy and Physiology (4)
CDEV 103	Child Growth and Development (3)
PE 247	Swimming, Lifeguard Training (1)
PE 248	Swimming, Water Safety Instructor (2)
PSYC 5	General Psychology (3)
SLAN 111	American Sign Language I (4)

**Total Units: 21-23**

### Preparation for the Recreation Transfer Major

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

### Certificate of Accomplishment

A Certificate of Accomplishment will be granted upon completion of all program requirements. All units required for the certificate must be completed at El Camino College.

### Recreation Leadership Certificate of Accomplishment

#### Course Title

##### Required Core: 9 units

FAID 1	First Aid, Cardiopulmonary Resuscitation (CPR) and Basic Emergency Care (3)
RECR 207	Introduction to Recreation (3)
RECR 217	Recreational Leadership (3)

##### 6 units from:

CDEV 104	The Home, The School, The Community (3)
PE 201	Introduction to Adapted Physical Education (2)
PE 217	Sports Officiating (2)
PE 247	Swimming, Lifeguard Training (1)
PE 277	Introduction to Kinesiology and Physical Education (3)

**Total Units: 15**

### 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\**

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: Transfer limitations apply.*

*Note: The total units earned for Cooperative Work Experience Education may not exceed 16 units.*

### Recreation 207

#### Introduction to Recreation

3 units; 3 hours lecture

*Recommended Preparation: eligibility for English 1A*

*Credit, degree applicable*

*Transfer CSU*

This course examines the basic concepts of recreation and leisure as well as the trends in the overall field of recreation services. The course is designed to encourage students to critically examine the field of recreation and how it impacts their lives and those of the individuals in their community.

**Recreation 217****Recreational Leadership**

3 units; 3 hours lecture

Recommended Preparation: eligibility for English 1A

Credit, degree applicable

Transfer CSU

Leadership concepts and skills for students beginning to work in recreational settings are presented in a leisure services context. Roles, types, and responsibilities of recreational leaders are examined as well as skills needed to encourage participation in recreation programs among different age groups.

**Recreation 307****Camp Counseling: Leadership and Programming**

3 units; 3 hours lecture

Recommended Preparation: eligibility for English 1A

Credit, degree applicable

Transfer CSU

This course covers the history, practices, and philosophy of organized camp and camp counseling. Emphasis is placed on the camp counselor's role in guidance and leadership, analysis of techniques of camp counseling, proper planning, and theory of camping. The operations of day and short-term recreational camps and outdoor camps, as well as professional opportunities in the field are also examined.

**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

Course	Title
RC 176	Introduction to the Respiratory Care of the Non-Critically Ill Patient (6)
RC 178	Respiratory Care of the Critically Ill Patient I (8)
RC 280	Respiratory Care of the Critically Ill Patient II (9)
RC 282	Fundamentals of Perinatal and Pediatric Respiratory Care (4)
RC 286	Fundamentals of Pulmonary Rehabilitation and Home Respiratory Care (3)
RC 288	Fundamentals of Pulmonary Function Testing (3)
RC 289	Advanced Respiratory Care of the Asthmatic Patient (3)
RC 290	Advanced Specialty Respiratory Gases (2)
RC 294	Pulmonary Function Testing in Advanced Respiratory Care (4)
RC 295	Pharmacology in Advanced Respiratory Care (3)
RC 298	Advanced Emergency Management (3)

**Total Units: 48**

Note: Students without previous medical training are strongly advised to complete Respiratory Care 170.



**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.

**Respiratory Care Certificate of Achievement**

Course	Title
RC 284	Respiratory Care of the Critically Ill Patient III (9)
RC 291	Advanced Specialty Ventilators and Specialized Oxygen Delivery Devices (3)
RC 292	Advanced Clinical Application and Interpretation of Blood Gases (2)
RC 293	Cardiac Monitoring in Advanced Respiratory Care (4)
RC 296	Physical Examination in Advanced Respiratory Care (4)
RC 297	Perinatal and Pediatric Care in Advanced Respiratory Care (4)

**Total Units: 26**

For Gainful Employment program information, please visit [www.elcamino.edu/academics/healthsciences/respiratorycare](http://www.elcamino.edu/academics/healthsciences/respiratorycare)

**General Information**

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. The program has three phases that require specific courses and sequence.

For more program and admission information, go to [www.elcamino.edu/academics/healthsciences/respiratorycare](http://www.elcamino.edu/academics/healthsciences/respiratorycare).

**Preclinical Phase**

In the pre-clinical phase of the program, the student takes all the non-clinical Respiratory Care courses, which may include 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. For example, Psychology, Humanities, as well as Health and Physical Education courses or equivalent. (See academic counselor for specific coursework required for the associate degree in Respiratory Care.)

**Admission to the Clinical Phase**

Admission to the clinical phase of the program is limited by clinical space and budget considerations. In order to gain admittance to the clinical phase of the program, the student must complete the preclinical phase with a minimum grade of C in all courses. The student must also submit a program application and completed physical exam form with the required lab tests and readiness for clinical duties certified by an appropriate health care professional. Students may submit completed applications and physical exam forms when all the required preclinical coursework is completed. Applications are accepted by the program director up to the last day of the spring semester and students are assigned seats in the next clinical class based on verification of all required coursework, available space, qualifications, and academic merit. A new clinical class starts in the summer session each year.

**Initial-Clinical Associate Degree Phase**

In this clinical phase of the program, the student takes all the combined Respiratory Care science classroom and clinical courses required to receive the Respiratory Care program degree which, at a minimum, includes 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 session of any given year.

**Final-Clinical Certificate of Achievement Phase**

Two semesters of additional classroom/clinical advanced coursework are required to complete the requirements for the associate degree and the certificate of achievement from the advanced registry-level Respiratory Care program. The courses in this phase are Respiratory Care 284, 291, 292, 293, 296, 297. This phase follows the associate degree phase and ends at the end of the spring semester, two years after admission to Respiratory Care 176, ending with the awarding of the associate degree and certificate of achievement from the advanced respiratory care program.

**Program Costs**

In addition to tuition fees charged by the college, it is estimated that the cost of books, lab costs, stethoscopes and miscellaneous supplies is approximately \$3,500 over a two-year period. Financial assistance is available to students who meet the eligibility requirements.

**Admission Requirements and Length of Program**

For the high school graduate with a C average or better in science and math, the program will take at least 2 1/2 years to complete, including all prerequisites. A student is formally accepted into the clinical phase of the program after satisfactory completion of prerequisites, general education courses, and introductory respiratory care science courses.

**Procedure for Admission**

The student should apply for a reservation to register at El Camino College. An appointment with a Health Science counselor should be made so that the matriculation process can be completed. Students wishing to take advanced college work after graduation may choose a specific general education track. All respiratory care science and clinical courses must be taken and completed with at least a C or better.

For more program and admission information, go to [www.elcamino.edu/academics/healthsciences/respiratorycare](http://www.elcamino.edu/academics/healthsciences/respiratorycare).

**Respiratory Care 170*****Introduction to Respiratory Care Sciences and the Profession***

*2 units; 2 hours lecture  
Credit, degree applicable*

This course provides students an opportunity to see if their attitudes, aptitudes and interests are matched to those needed by successful respiratory care practitioners. The course reviews all the requirements for successful completion of the program and entrance into the health care industry. The course will also provide the student with an introduction to the basic sciences as they apply in the Respiratory Care profession.

**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 or concurrent enrollment  
Credit, degree applicable*

This course will cover the fundamental cardiopulmonary anatomy, physiology, and pharmacology required for entry-level practice in the Respiratory Care profession. In addition, emphasis will be placed on the achievement and maintenance of bronchial hygiene in patients with respiratory disorders through the use of airway care, aerosols, and chest physiotherapy.

**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  
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 the 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 Respiratory Care 174 with a minimum grade of C in prerequisite  
Recommended Preparation: Computer Information Systems 13 and 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.

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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 282*****Fundamentals of Perinatal and Pediatric Respiratory Care***

4 units; 2 hours lecture, 6 hours lab per week to be arranged

*Enrollment Limitation: Students must be admitted to the El Camino College Respiratory Care Program or be graduated from an accredited respiratory care program.*

*Credit, degree applicable*

This course will introduce the student to the basic anatomy and physiology of the fetus, neonate and pediatric patient. The student will learn the fundamental therapeutic procedures, equipment and data used to provide pediatric and perinatal respiratory care. Pediatric basic and advanced life support will also be taught in the classroom, lab and clinical setting.

**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

*Enrollment Limitation: Students must be admitted to the El Camino College Respiratory Care Program or be graduated from an accredited respiratory care program.*

*Credit, degree applicable*

This course focuses on the treatment and management of adult patients who have chronic respiratory conditions and diseases. The course provides the student with the opportunity to develop skills managing patients requiring pulmonary rehabilitation and home respiratory care. The problem-oriented approach to developing a Respiratory Care plan will be covered emphasizing the use of, and the ability to collect, patient data. Skills to be learned will include performance of a physical exam of the patient, arterial puncture, establishment of intravenous fluid lines, exercise evaluation, patient education and prevention of infection.

**Respiratory Care 288*****Fundamentals of Pulmonary Function Testing***

3 units; 2 hours lecture, 3 hours lab per week to be arranged

*Enrollment Limitation: Students must be admitted to the El Camino College Respiratory Care Program or be graduated from an accredited respiratory care program.*

*Credit, degree applicable*

This course will review the fundamental procedures and equipment used to measure pulmonary function in non-symptomatic populations and in populations of people with chronic pulmonary diseases. Experience with exhaled air data collection will be provided through hands-on procedures at the college and at health service organizations' diagnostic laboratories. Skills to be learned will include performance of public health screening and diagnostic pulmonary function testing.

**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 per week to be arranged**Enrollment Limitation: Students must be admitted to the El Camino College Respiratory Care Program or be graduated from an accredited respiratory care program.**Credit, degree applicable*

This course provides instruction in cardiac monitoring associated with advanced respiratory care. Topics include twelve-lead Electrocardiogram interpretation; central venous pressure; Pulmonary Artery Pressure; Cardiac Index; and usage of pressure transducers, pulmonary and arterial catheters, as well as treatment of cardiac conditions using electrolytes, cardiac medications and diuretics. Laboratory experiments and clinical visitation will be used to complement the didactic instruction.

**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 per week to be arranged**Enrollment Limitation: Students must be admitted to the El Camino College Respiratory Care Program or be graduated from an accredited respiratory care program.**Credit, degree applicable*

This course provides instruction in physical examination associated with advanced respiratory care. Topics include physical assessment; collection of lab data; the interview process; and current imaging studies.

**Respiratory Care 297*****Perinatal and Pediatric Care in Advanced Respiratory Care****4 units; 3 hours lecture, 3 hours lab per week to be arranged**Enrollment Limitation: Students must be admitted to the El Camino College Respiratory Care Program or be graduated from an accredited respiratory care program.**Credit, degree applicable*

This course provides instruction in perinatology and pediatrics associated with advanced respiratory care. Topics include respiratory care monitoring; diagnostics; advanced concepts in emergency procedures; and current topics in perinatal and pediatric respiratory care. Laboratory experiments and clinical visitation will be used to complement lectures.

**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.

**Secretarial****See Business**

## SIGN LANGUAGE/ INTERPRETER TRAINING

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

*Health Sciences and Athletics Division*  
[www.elcamino.edu/academics/healthsciences](http://www.elcamino.edu/academics/healthsciences)

Upon completion of the program, students will have the necessary language and interpreting skills for entry-level sign language interpreting positions in a variety of community settings, such as medical, vocational, and post-secondary. American Sign Language (ASL) and deaf culture courses give students general communication skills for interacting and working with deaf and hard-of-hearing individuals. Interpreting coursework enhances ASL/English cross-cultural communication styles in consecutive and simultaneous interpreting, and includes training in the ethics and practical approaches that must be understood by a practicing interpreter. Students will be prepared to take local evaluations and/or transfer to a four year program. Most students who continue to develop their interpreting skills will be prepared to seek national certification within two to five years.

At least 50 percent of the courses required for the major must be completed at El Camino College.

Course	Title
SLAN 113	American Sign Language III (4)
SLAN 114	American Sign Language IV (4)
SLAN 115	American Sign Language V (4)
SLAN 120	Fingerspelling and Numerical Concepts (1)
SLAN 130	Deaf Culture (3)
SLAN 200	Principles of Sign Language Interpreting (3)
SLAN 210	American Sign Language to English Interpreting I (2)
SLAN 211	English to American Sign Language Interpreting I (2)
SLAN 220	American Sign Language to English Interpreting II (2)
SLAN 221	English to American Sign Language Interpreting II (2)
SLAN 230	Sign Language Interpreting III (2)
SLAN 240	Interpreting Practicum (3)

**Total Units: 32**

#### Recommended Electives:

ANTH 4	Language and Culture (3)
CDEV 150	Introduction of Children with Special Needs (3)
COMS 100	Public Speaking (3)
THEA 113	Introduction to Acting (3)

### Certificate of Achievement

A Certificate of Achievement will be granted upon completion of the program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

### Sign Language/Interpreter Training Certificate of Achievement

#### Course Title

#### Required Core: 36 units

SLAN 113	American Sign Language III (4)
SLAN 114	American Sign Language IV (4)
SLAN 115	American Sign Language V (4)
SLAN 120	Fingerspelling and Numerical Concepts (1)
SLAN 130	Deaf Culture (3)
SLAN 200	Principles of Sign Language Interpreting (3)
SLAN 210	American Sign Language to English Interpreting I (2)
SLAN 211	English to American Sign Language Interpreting I (2)
SLAN 220	American Sign Language to English Interpreting II (2)
SLAN 221	English to American Sign Language Interpreting II (2)
SLAN 230	Sign Language Interpreting III (2)
SLAN 240	Interpreting Practicum (3)
ENGL 1A	Reading and Composition (4)

#### 3 units from:

ANTH 4	Language and Culture (3)
CDEV 150	Introduction of Children with Special Needs (3)
COMS 100	Public Speaking (3)
THEA 113	Introduction to Acting (3)

**Total Units: 39**

For Gainful Employment program information, please visit [www.elcamino.edu/academics/src/signlang.asp](http://www.elcamino.edu/academics/src/signlang.asp)

**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*

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: Transfer limitations apply.**Note: The total units earned for Cooperative Work Experience Education may not exceed 16 units.***Sign Language/Interpreter Training 101**

(formerly 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 111**

(formerly Sign Language/Interpreter Training 15)

**American Sign Language I***4 units; 4 hours lecture**Credit, degree applicable**Transfer CSU, UC*

This beginning course, taught within the context of deaf culture, introduces students to signing and comprehending elementary American Sign Language (ASL). Through a visual-gestural approach and multimedia activities, students develop basic vocabulary and grammar that deal with everyday topics.

*Note: This course is comparable to two years of high school sign language.***Sign Language/Interpreter Training 112**

(formerly Sign Language/Interpreter Training 16)

**American Sign Language II***4 units; 4 hours lecture**Prerequisite: Sign Language/Interpreter Training 111 with a minimum grade of C**Credit, degree applicable**Transfer CSU, UC*

This course is a continuation of the study of American Sign Language (ASL) and deaf culture. Focusing on ASL structure and grammar used by native signers, students will develop fluency at the intermediate level.

*Note: The prerequisite for this course is comparable to two years of high school sign language.***Sign Language/Interpreter Training 113**

(formerly Sign Language/Interpreter Training 17A)

**American Sign Language III***4 units; 4 hours lecture**Prerequisite: Sign Language/Interpreter Training 112 with a minimum grade of C**Credit, degree applicable**Transfer CSU, UC*

This course is a continuation of the study of American Sign Language (ASL) II and deaf culture. Further study of vocabulary, structure, and narrative techniques will help students develop language fluency to discuss abstract ideas and environments outside the classroom.

**Sign Language/Interpreter Training 114**

(formerly Sign Language/Interpreter Training 17B)

**American Sign Language IV***4 units; 4 hours lecture**Prerequisite: Sign Language/Interpreter Training 113 with a minimum grade of C or equivalent**Credit, degree applicable**Transfer CSU, UC*

This course, taught within the context of deaf culture, is a continuation of the study of American Sign Language (ASL) III. Further study of conversational and narrative techniques for advanced practice will help students develop language fluency at the advanced level. This course provides an expanded review of ASL vocabulary, syntactical structures, grammatical patterns and current linguistic research.

**Sign Language/Interpreter Training 115****American Sign Language V***4 units; 4 hours lecture**Prerequisite: Sign Language/Interpreter Training 114 with a minimum grade of C**Credit, degree applicable**Transfer CSU, UC*

This course builds on the cultural competence and language skills developed in American Sign Language (ASL) IV and are designed for students to strengthen both conversational and formal ASL skills. In addition, advanced work is presented in ASL linguistics, deaf culture, specialized vocabulary and fingerspelling.

**Sign Language/Interpreter Training 120**

(formerly Sign Language/Interpreter Training 214)

**Fingerspelling and Numerical Concepts***1 unit; 1 hour lecture, 2 hours lab**Prerequisite: Sign Language/Interpreter Training 111 with a minimum grade of C**Credit, degree applicable**Transfer CSU*

This course is designed to provide beginning and advanced practice with the sign language component known as fingerspelling. Skill development for expressive and receptive fingerspelling, numerical concepts, and lexicalized signs will enhance the student's ability to comprehend and utilize fingerspelling with accuracy and clarity.

*Note: Pass/no pass only.*

**Sign Language/Interpreter Training 130**

(formerly 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, political, and linguistic aspects of the culture of the deaf. Discussion and topics will provide the student with an understanding of the issues of being a deaf individual in a hearing world and trends of the deaf culture.

**Sign Language/Interpreter Training 131**

(formerly 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 the psychological and social implications of deafness. Causes of deafness and modern technological advances are explored.

**Sign Language/Interpreter Training 200****Principles of Sign Language Interpreting**

3 units; 3 hours lecture

Prerequisite: Sign Language/Interpreter Training 114 with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course is an introduction to the field of sign language interpreting. Topics will include history, definitions, settings, standards, and certification. Focus on ethics and the interpreting process provides a theoretical foundation for interpreting coursework.

**Sign Language/Interpreter Training 210****American Sign Language to English Interpreting I**

2 units; 2 hours lecture, 2 hours lab

Prerequisite: Sign Language/Interpreter Training 115 and 200 with a minimum grade of C in prerequisite

Credit, degree applicable

Transfer CSU

This course provides beginning skills for interpreting from signed messages into written and spoken English. Signed texts will be analyzed for language use and meaning. Translation, consecutive, and simultaneous interpreting will be studied and practiced. Students will begin to develop skills to become culturally sensitive, ethical, and professional interpreters.

Note: This course is recommended to be taken with Sign Language/Interpreter Training 211.

**Sign Language/Interpreter Training 211****English to American Sign Language Interpreting I**

2 units; 2 hours lecture, 2 hours lab

Prerequisite: Sign Language/Interpreter Training 115 and 200 with a minimum grade of C in prerequisite

Credit, degree applicable

Transfer CSU

This course provides beginning skills for interpreting from English into sign language. Written and spoken English texts will be analyzed for language use and meaning. Translation, consecutive, and simultaneous interpreting will be studied and practiced. Students will begin to develop skills to mediate linguistically and culturally between deaf and hearing individuals, and to ethically apply these skills.

Note: This course is recommended to be taken with Sign Language/Interpreter Training 210.

**Sign Language/Interpreter Training 220****American Sign Language to English Interpreting II**

2 units; 2 hours lecture, 2 hours lab

Prerequisite: Sign Language/Interpreter Training 210 with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course is a continuation of American Sign Language (ASL) to English I and provides intermediate knowledge and skill development in simultaneous and interactive sign to voice interpreting. Topics include continued study of discourse analysis, the interpreting process, ethical and cultural considerations, and linguistic mediation techniques.

Note: This course is recommended to be taken with Sign Language/Interpreter Training 221.

**Sign Language/Interpreter Training 221****English to American Sign Language Interpreting II**

2 units; 2 hours lecture, 2 hours lab

Prerequisite: Sign Language/Interpreter Training 211 with a minimum grade of C

Credit, degree applicable

Transfer CSU

This course is a continuation of English to American Sign Language I and provides intermediate knowledge and skill development in simultaneous and interactive voice to sign interpretation and transliteration. Topics include continued study of discourse analysis, the interpreting process, and ethical demands and controls. Further study of linguistic and cultural mediation will also be explored.

Note: This course is recommended to be taken with Sign Language/Interpreter Training 220.

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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 230***Sign Language Interpreting III**2 units; 2 hours lecture, 2 hours lab**Prerequisite: Sign Language/Interpreter**Training 220 and 221 with a minimum grade of C in prerequisite**Credit, degree applicable**Transfer CSU*

This course is an advanced study of the interpretation process. Intensive skill development in interpreting from English to American Sign Language (ASL) and ASL to English requires advanced cognitive and linguistic skills. Discourse analysis of various communication genres and specialized settings will be studied, along with a continued focus on ethics and cultural mediation.

**Sign Language/Interpreter Training 240***(formerly Sign Language/Interpreter Training 20)**Interpreting Practicum**3 units; 2 hours lecture, 3 hours lab per week to be arranged**Prerequisite: Sign Language/Interpreter Training 220 and 221 with a minimum grade of C in prerequisite**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.

**SOCIOLOGY****AA-T Degree***Behavioral and Social Sciences Division**[www.elcamino.edu/academics/behavioralsocial](http://www.elcamino.edu/academics/behavioralsocial)*

The sociology degree provides students with a foundation in the science of sociology. Upon successful completion of the program requirements, the student will acquire an understanding of major sociological concepts and theoretical perspectives on social problems and social life as they apply to the individual, group, and society. Students will also understand the principles of research methods and data analysis. The major prepares students for transfer to four year colleges and universities as part of preparation for careers in sociology or related fields such as teaching, research, social work, public relations, and counseling. Students will demonstrate their proficiency in sociological competencies through examinations and writing assignments on the major sociological theories, topics of sociological study, and research techniques.

The Associate in Arts for Transfer (AA-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AA-T are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AA-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AA-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AA-T.

Course	Title
<b>Required Core: 3 units</b>	
SOCI 101	Introduction to Sociology (3)
<b>List A: 7 units</b>	
SOCI 104	Social Problems (3)
MATH 150	Elementary Statistics with Probability (4)
or	
PSYC 9A	Introduction to Elementary Statistical Methods for the Study of Behavior (4)
or	
SOCI 109	Introduction to Elementary Statistical Methods for the Study of Behavior (4)
<b>List B: 6 units</b>	
SOCI 102	The Family (3)
SOCI 107	Issues of Race and Ethnicity in the United States (3)
SOCI 112	Introduction to Criminology (3)
PSYC 8	Social Psychology (3)
<b>List C: 3 units</b>	
ANTH 2	Introduction to Cultural Anthropology (3)
ASTU 7	History of American Popular Culture (3)
PSYC 12	Human Sexuality (3)
PSYC 16	Lifespan Development (3)
SOCI 108	Global Perspectives on Race and Ethnicity (3)
WSTU 1	Introduction to Women's Studies (3)
<b>Total Units: 19</b>	

### 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 will provide students with an overview of the sociological perspective on the institution of family. Both historical and contemporary aspects of singlehood, courtship, mate selection, love, cohabitation, marriage, and divorce will be examined. Components of family life including gender socialization, parenting styles, communication, and conflict resolution will be analyzed using various theoretical perspectives. Emphasis will be placed on examining diverse family structure and relationships as well as how family experiences are shaped by social class, race, ethnicity, gender, and sexual orientation.

### 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.

Note: This course is only offered in the fall semester.

**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.

*Note: This course is only offered in the spring semester.***Sociology 109*****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 73 or 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: This course is only offered in the fall semester.**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 112*****Introduction to Criminology****3 units; 3 hours lecture**Recommended Preparation: Sociology 101 and 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.

*Note: This course is only offered in the fall semester.***SPANISH****A.A. Degree*****Humanities Division******www.elcamino.edu/academics/humanities***

By completing the degree requirements, the student will acquire proficiency in speaking, reading, writing, and understanding Spanish and will gain knowledge of Spanish and Spanish-American culture. The student will be able to communicate in Spanish, write formal compositions, and read the texts of Spanish and Spanish-American authors, all at the Intermediate-Mid level of competency. Competencies will be assessed throughout the language sequence with written and oral exams. This major provides career opportunities where knowledge of Spanish is useful and prepares students for continued advanced learning of Spanish.

The student who has completed two or more years of Spanish in high school will have the opportunity to enroll with advanced standing and to complete semesters 5 and/or 6 at El Camino College. It is recommended that language majors enroll in conversation classes.

At least 50 percent of the courses required for the Spanish major must be completed at El Camino College. Spanish 4 must be completed at El Camino College.

**Course Title*****Required Core: 4 units***

SPAN 4 Intermediate Spanish II (4)

***4-11 units from:***

SPAN 1 Elementary Spanish I (4)

SPAN 2 Elementary Spanish II (4)

SPAN 3 Intermediate Spanish I (4)

SPAN 5 Advanced Spanish I (3)

SPAN 6 Advanced Spanish II (3)

SPAN 21 Beginning Conversational Spanish (2)

SPAN 22 Intermediate Conversational Spanish (2)

SPAN 52A Spanish for Native Speakers I (4)

SPAN 52B Spanish for Native Speakers II (4)

***a minimum of 3 units from:***

ANTH 7 Native Peoples of South America (3)

ART 207 Art History of Mexico and Central and South America (3)

ENGL 42 Chicano and Latino Literature (3)

ENGL 48 Modern Literature of Latin America (3)

HIST 112 History of the Chicano in the United States (3)

HIST 154 A History of Mexico (3)

**Total Units: 18****Preparation for the Spanish Transfer Major**

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

## SPANISH

### AA-T 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 texts of Spanish and Spanish-American authors, all at the Intermediate-Mid level of competency. Competencies will be assessed throughout the language sequence with written and oral exams. This major provides opportunities for continued advanced learning of Spanish and prepares students to transfer and major in Spanish.

The Associate in Arts for Transfer (AA-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AA-T are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AA-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AA-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AA-T.

#### Course Title

##### 16 units from:

SPAN 1	Elementary Spanish I (4)
SPAN 2	Elementary Spanish II (4)
SPAN 3	Intermediate Spanish I (4)
or	
SPAN 52A	Spanish for Native Speakers I (4)
SPAN 4	Intermediate Spanish II (4)
or	
SPAN 52B	Spanish for Native Speakers II (4)

##### List A: 3-5 units

SPAN 5	Advanced Spanish I (3)
SPAN 6	Advanced Spanish II (3)
SPAN 21	Beginning Conversational Spanish (2)
SPAN 22	Intermediate Conversational Spanish (2)

##### Total Units: 19-21

### Spanish 1

#### Elementary Spanish I

4 units; 5 hours lecture

Recommended Preparation: eligibility for English 1A

Credit, degree applicable

Transfer CSU, UC\*

This course introduces students to the development of skills for language acquisition in speaking, listening, reading, and writing linguistically appropriate Spanish. Students are also introduced to the cultural background of the language, including relationships among cultural practices and perspectives and the general aspects of everyday life. Technological support includes videos, DVDs, audio CDs, and Internet access to publishers' websites for tutoring and other support.

Note: 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.

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

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**Spanish 6****Advanced Spanish II***3 units; 3 hours lecture**Prerequisite: Spanish 5 with a minimum grade of C or equivalent**Credit, degree applicable**Transfer CSU, UC*

This advanced course, taught within the context of Spanish and Spanish-American culture, introduces students to Spanish and Spanish-American literary criticism. Students learn how to write critically about the works of representative Spanish and Spanish-American writers to acquire fluency in the language. Written Spanish, with an emphasis on vocabulary building and functional grammar, is also included.

**Spanish 21**

(formerly 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 22**

(formerly Spanish 22ab)

**Intermediate Conversational Spanish***2 units; 2 hours lecture**Prerequisite: Spanish 2 and Spanish 21 with a minimum grade of C in prerequisite or equivalent**Credit, degree applicable**Transfer CSU, UC*

This course is designed for the intermediate student to develop Spanish language fluency in oral expression, increase oral comprehension, and improve pronunciation. Conversational topics are based upon the daily experiences and cultural life of the ethnic areas involved with the Spanish language.

**Spanish 52A****Spanish for Native Speakers I***4 units; 5 hours lecture**Prerequisite: Spanish 2 with a minimum grade of C or equivalent**Credit, degree applicable**Transfer CSU, UC\**

This course is designed for students with a native-speaking knowledge of Spanish and who have little or no formal instruction in the Spanish language. Students develop the cultural and linguistic ability to use correct spoken and written Spanish free from regionalisms and Anglicisms. Students learn to correct faulty Spanish speech habits, improve vocabulary, and acquire skills in writing. Students also become familiar with the similarities and differences existing within and between the cultures of Spain, as well as the Caribbean and North and Central American Spanish-speaking countries.

*\*Note: The maximum UC credit allowed for students completing Spanish 1 and Spanish 52A and 52B is four units.*

**Spanish 52B*****Spanish for Native Speakers II****4 units; 5 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 99**

(formerly 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\**

This course provides special advanced studies in a subject field of Spanish not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Spanish projects (54 hours per unit).

*\*Note: Transfer limitations apply.*

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

**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.*

**THEATRE****A.A. Degree and Certificate*****Fine Arts Division******[www.elcamino.edu/academics/finearts](http://www.elcamino.edu/academics/finearts)***

The theatre program provides students with a comprehensive foundation in theatre, history, practice of theatre, and entertainment lighting. This is fulfilled through a structured program of theatre study in the areas of history, dramatic literature, acting, performance, technical theatre, entertainment lighting, and related crafts. Students will demonstrate their proficiency through acting competency, public performance, research papers, essays, class projects, and technical crew assignments. Program assessment is measured by public performances, program completion, transferability, and periodic program review. Students qualify to pursue a variety of theatre and entertainment related careers and advanced degree options.

**Course****Title*****Required Core: 21 units***

THEA 103	Theatre Appreciation (3)
THEA 104	Dramatic Literature (3)
THEA 114	Fundamentals of Acting (3)
THEA 184	Stagecraft (3)
THEA 185	Introduction to Stage Lighting (3)
THEA 189	Costuming for the Stage (3)
THEA 214A	Intermediate Acting (3)

***3 units from:***

THEA 197abcd*	Technical Theatre Production (1)
THEA 270abcd	Beginning Theatre Production (1)

***2-3 units from:***

THEA 188	Fundamentals of Stage Makeup (3)
THEA 215	Improvisation (2)
THEA 216	Acting: Audition and Cold Reading (3)
THEA 217	Acting Shakespeare (3)
THEA 240	Fundamentals of Stage Direction (3)

**Total Units: 26-27**

*\*Note: a minimum of 1 unit from THEA 197abcd is required.*

**Preparation for the Theatre 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.

**Certificate of Achievement**

A Certificate of Achievement will be granted upon completion of all program requirements.

**Entertainment Lighting Technology Certificate of Achievement**

Course	Title
THEA 184	Stagecraft (3)
THEA 185	Introduction to Stage Lighting (3)
THEA 190	Operation of Intelligent Lighting Fixtures (2)
THEA 191	Repair and Maintenance of Intelligent Lighting Systems (2)
THEA 192	Setup of Intelligent Lighting Systems (2)
THEA 193	Programming and Lighting Design with Intelligent Lighting Systems (2)
THEA 197abcd*	Technical Theatre Production (1)
THEA 294	Computer Applications for the Entertainment Lighting Industry (3)
THEA 295	Industry Analysis and Portfolio Planning for the Entertainment Lighting Industry (2)

**Total Units: 21**

\*Note: two semesters of THEA 197abcd is required for the certificate.

For Gainful Employment program information, please visit [www.elcamino.edu/academics/finearts/theatre](http://www.elcamino.edu/academics/finearts/theatre)

**THEATRE ARTS****AA-T Degree**

*Fine Arts Division*

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

The theatre program provides students with a comprehensive foundation in theatre, history, practice of theatre, and entertainment lighting. This is fulfilled through a structured program of theatre study in the areas of history, dramatic literature, acting, performance, technical theatre, entertainment lighting, and related crafts. Students will demonstrate their proficiency through acting competency, public performance, research papers, essays, class projects, and technical crew assignments. Program assessment is measured by public performances, program completion, transferability, and periodic program review. Students qualify to pursue a variety of theatre and entertainment related careers and advanced degree options. This program prepares students to transfer to a CSU and major in Theatre, Theatre Arts, or Drama.

The Associate in Arts for Transfer (AA-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing the AA-T are given priority consideration for admission to the CSU system, but not to a particular campus or major. In order to earn an AA-T degree, students must complete:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.
3. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
4. Obtainment of a minimum grade point average of 2.0.
5. A grade of "C" or better in all courses required for the major or area of emphasis.

Students who have completed the AA-T will have a strong academic foundation in the field and will be prepared for upper division baccalaureate study at the university. The coursework will satisfy most of the lower-division requirements at many institutions within the California State University system. Students transferring to a UC, private, or out-of-state university should consult with an El Camino College counselor when planning to complete the degree since transfer requirements may be slightly different than those required for the AA-T.



<b>Course</b>	<b>Title</b>
<b>Required Core: 9 units</b>	
THEA 103	Theatre Appreciation (3)
THEA 114	Fundamentals of Acting (3)
<b>Select a maximum of 3 units from Rehearsal and Performance or from Technical Theatre Practicum courses.</b>	
<b>Rehearsal and Performance: 3 units</b>	
THEA 175abcd	Student Performance Production Workshop (1)
THEA 270abcd	Beginning Theatre Production (1)
THEA 274abcd	Musical Theatre Production (1)
or	
<b>Technical Theatre Practicum: 3 units</b>	
THEA 197abcd	Technical Theatre Production (1)
THEA 297ab	Advanced Technical Theatre Production (1)
<b>List A: 9 units - If not used in core requirements, select a maximum of 3 units from Rehearsal and Performance or Technical Theatre Practicum courses.</b>	
THEA 104	Dramatic Literature (3)
THEA 175abcd	Student Performance Production Workshop (1)
THEA 184	Stagecraft (3)
THEA 185	Introduction to Stage Lighting (3)
THEA 188	Fundamentals of Stage Makeup (3)
THEA 189	Costuming for the Stage (3)
THEA 197abcd	Technical Theatre Production (1)
THEA 214A	Intermediate Acting (3)
THEA 270abcd	Beginning Theatre Production (1)
THEA 274abcd	Musical Theatre Production (1)
THEA 297ab	Advanced Technical Theatre Production (1)
<b>Total Units: 18</b>	

**Theatre 95**

(formerly 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\*

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Theatre Arts field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

\*Note: Transfer limitations apply.

Note: The total units earned for Cooperative Work Experience Education may not exceed 16 units.

**Theatre 99**

(formerly 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

This course provides special advanced studies in a subject field of Theatre not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Theatre projects (54 hours per unit).

\*Note: Transfer limitations apply.

Note: For eligibility requirements, go to

[www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp)**Theatre 103**

(formerly Theatre 1)

**Theatre Appreciation**

3 units; 3 hours lecture

*Recommended Preparation: eligibility for English 1A*

Credit, degree applicable

Transfer CSU, UC

This course is a survey of theatre focusing on the theory and practice of modern theatre. Topics include acting, directing, design of scenery, architecture, lighting, costuming, makeup, stage properties, and the American musical. Elements of playwriting, critical analysis, and career opportunities are also covered. Attendance is required at selected theatre events at El Camino College presented by the Theatre Department, El Camino College Center for the Arts, and selected master classes related to professional events.

**Theatre 104**

(formerly 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 113**

(formerly Theatre 8)

**Introduction to Acting**

3 units; 2 hours lecture, 3 hours lab

*Recommended Preparation: eligibility for English 84 or**English as a Second Language 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 114**

(formerly Theatre 14A)

**Fundamentals of Acting**

3 units; 2 hours lecture, 3 hours lab

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

This course is a study of the techniques, styles, and disciplines of acting. The student is provided theory and practical experience with varied characterizations. Emphasis is placed on individual growth and acquired skills demonstrated through play and character analysis followed by presentation of scenes from contemporary realistic plays. Attendance is required at selected theatre events offered by the El Camino College Center for the Arts and in the community.

**Theatre 175abcd**

(formerly 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 113 or Theatre 114
2. Student directors: Theatre 240

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

This course is a theatre workshop in which students participate in a production under faculty supervision as directors or performers. Students will demonstrate their theatrical skills and be ranked on their acting and/or directorial abilities in a live theatrical performance through participation in the Kennedy Center American College Theater Festival (KCACTF) competition.

**Theatre 184**

(formerly 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 185**

(formerly Theatre 90)

**Introduction to Stage Lighting**

3 units; 2 hours lecture, 3 hours lab

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

This course emphasizes the operation of stage lighting equipment, planning and rigging of lighting units, operation of control systems and related equipment, light sources, stage electricity, color in light, and the design of stage lighting. Students must attend selected theatre events at El Camino College Center for the Arts.

**Theatre 188**

(formerly Theatre 88)

**Fundamentals of Stage Makeup**

3 units; 2 hours lecture, 3 hours lab

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

This course is a study of basic makeup tools, materials, techniques and methods used in creating various character effects for stage and television. Emphasis is placed on the acquisition of practical skills from assignments that cover straight, corrective, and character makeup, including the effects of aging, beards, hair styles, fantasy, and facials distortions.

**Theatre 189**

(formerly 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, patternmaking, fabric design and dyeing, proper use and maintenance of equipment, and the duties of wardrobe crews and chiefs. Students must attend selected theatre events at El Camino College Center for the Arts.

**Theatre 197abcd**

(formerly Theatre 97abcd)

**Technical Theatre Production**

1 unit; minimum 3 hours lab per week to be arranged

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

This course is a performance and rehearsal laboratory designed to support the public presentations of the Theatre Department. Emphasis will be placed on the roles and production needs of the technical theater team including stage management, properties, costume, sound, lights, makeup, and deck crew. Students will have the opportunity to demonstrate their technical theater skills and be ranked on their ability to successfully crew a live performance through participation in the Kennedy Center American College Theater Festival (KCACTF) competition.

**Theatre 214A**

(formerly Theatre 14B)

**Intermediate Acting**

3 units; 2 hours lecture, 3 hours lab

*Prerequisite: Theatre 114 with a minimum grade of C**Credit, degree applicable**Transfer CSU, UC*

This course is a continuation of Theatre 114 and focuses on continued study in the methodology and process of acting for the stage and includes in-depth character study through use of personalization skills, imagery, environment, stage life, situation and motivation, given and imaginary circumstances, emotional and sense-memory recall, obstacles and objectives, through-line of action and character biographies. Attendance is required at selected theatre events at El Camino College Center for the Arts and in the community. This course is required for the theatre major.

**Theatre 215**

(formerly Theatre 15abcd)

**Improvisation***2 units; 1 hour lecture, 3 hours lab**Recommended Preparation: Theatre 113 or Theatre 114**Credit, degree applicable**Transfer CSU, UC*

This course introduces students to improvisational acting through games, exercises, and unrehearsed scenes. Emphasis is placed on working without a script, trusting one's instincts, and expanding one's expressive range.

**Theatre 216**

(formerly Theatre 16abcd)

**Acting: Audition and Cold Reading***3 units; 2 hours lecture, 3 hours lab**Prerequisite: Theatre 114 with a minimum grade of C or equivalent**Credit, degree applicable**Transfer CSU*

This course prepares students to audition for university placement or professional theatre. Topics will include interpreting and developing a character at the audition-ready level, completion of a portfolio and resume, interpreting assigned scripts according to the Shurtleff "Guideposts" for successful cold reading, and preparation and maintenance of at least three monologues for auditions.

**Theatre 217**

(formerly Theatre 22ab)

**Acting Shakespeare***3 units; 2 hours lecture, 3 hours lab**Prerequisite: Theatre 113 or Theatre 114 with a minimum grade of C in prerequisite or equivalent**Credit, degree applicable**Transfer CSU, UC*

This course focuses on the technique of understanding and playing selected works of Shakespeare through research, exercises and scene study. The student's training will include textual analysis, historical research, scansion, imagery, vocal technique and period movement, song and dance.

**Theatre 240**

(formerly Theatre 40A)

**Fundamentals of Stage Direction***3 units; 2 hours lecture, 3 hours lab**Prerequisite: Theatre 214A with a minimum grade of C or concurrent enrollment**Credit, degree applicable**Transfer CSU, UC*

This course is a study of the director's approach to play analysis, dramatic and aesthetic values, thematic choices, characterizations, casting, rehearsal techniques, and the organization of performances. The final project is the preparation and presentation of a ten-minute one-act play complete with promptbook, master movement plan, ground plan, rehearsal schedule, prop list, and a complete written play analysis. Attendance is required.

**Theatre 270abcd**

(formerly Theatre 70abcd)

**Beginning Theatre Production***1 unit; 3 hours lab per week to be arranged**Enrollment Limitation: audition**Credit, degree applicable**Transfer CSU, UC*

This theatre production course is an acting workshop in which students learn performance skills and rehearsal discipline through active participation in a major theatrical production. Students will demonstrate their performance skills and be ranked on their acting abilities in a live performance through participation in the Kennedy Center American College Theater Festival (KCACTF) competition.

**Theatre 274abcd**

(formerly Theatre 74abcd)

**Musical Theatre Production***1 unit; 3 hours lab per week to be arranged**Enrollment Limitation: audition**Credit, degree applicable**Transfer CSU, UC*

This course is a musical theater workshop. Students learn performance skills and rehearsal discipline through active participation in a live major musical theater production that integrates singing, dancing, and acting. Students will have the opportunity to demonstrate and be ranked on their singing, acting, and dancing skills and insights into creating a musical theater character through competition in the Kennedy Center American College Theater Festival (KCACTF).

**Theatre 295**

(formerly Theatre 195)

**Industry Analysis and Portfolio Planning for the Entertainment Lighting Industry***2 units; 2 hours lecture**Credit, degree applicable**Transfer CSU*

This course analyzes the various sectors of the entertainment lighting industry and provides instruction in portfolio planning.

**Theatre 297ab**

(formerly Theatre 98ab)

**Advanced Technical Theatre Production***1 unit; minimum 3 hours lab per week to be arranged**Prerequisite: four semesters of Theatre 197abcd with a minimum grade of C**Credit, degree applicable**Transfer CSU, UC*

This course is an advanced rehearsal and performance laboratory to support the public presentations of the Theater Department. Emphasis will be placed on the role of the technical theater production needs focusing on stage management and including properties, costume, sound, lights, makeup, and deck crew.. Students will have the opportunity to demonstrate and be ranked on their technical theater skills and abilities to successfully crew a live performance through competition in the Kennedy Center American College Theater Festival (KCACTF).

## TRANSFER STUDIES

### Certificates of Achievement

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

The transfer studies certificate provides students with the opportunity to explore diverse methods of inquiry through course work required for fulfilling California State University General Education Breadth requirements or the Intersegmental General Education Transfer Curriculum (IGETC). Students will develop critical thinking skills, learn to communicate effectively in writing, and acquire an understanding of major concepts, issues, and diverse viewpoints. Through course options, students will use mathematical concepts to solve problems, employ methods of scientific inquiry to understand the world around them, and investigate the arts, humanities and social and behavioral sciences.

### Certificates of Achievement

#### CSU General Education-Breadth:

A Certificate of Achievement will be granted to students who complete a minimum of 39 units from category A through E of the CSU general education requirements.

Note: To receive full certification of the CSU general education pattern, a grade of C or better is required in areas A and B4. Certification means that El Camino College students have completed the lower division general education requirements for the CSU. Students must request certification in the Admissions Office.

Note: Completion of CSU General Education Breadth requirements alone is not enough to make students eligible for admission to a CSU. Please consult with a counselor for details on completing transfer admission requirements.

**Total Units: 39**

#### Intersegmental General Education Transfer Curriculum (IGETC):

A Certificate of Achievement will be granted to students who complete a minimum of 34 units to fulfill the IGETC pattern requirements.

Note: To receive full certification of the IGETC pattern, a grade of C or better is required in each course. Certification means that El Camino College has verified that students have completed the lower division general education requirements for IGETC. Students must request certification in the Admissions Office.

Note: Completion of the IGETC requirements alone is not enough to make students eligible for admission to a CSU or UC. Please consult with a counselor for details for completing transfer admission requirements.

**Total Units: 34**

## 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 and Learning Association training program requirements and is designed to help student tutors learn to communicate clearly and effectively with students needing academic assistance. Course content includes learning theories, tutorial techniques, program procedures and responsibilities, and tutoring practice.

*Note: 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 Certificate of Achievement

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

The welding program prepares students for employment in the field and provides opportunities for currently employed personnel to upgrade their skills. By completing the degree or certificate requirements, students gain proficiency in oxy-acetylene cutting, plasma arc cutting, shielded metal arc welding, gas metal arc welding, gas tungsten arc welding, and flux cored welding. Students develop skills in welding ferrous and non-ferrous alloys in flat, horizontal, vertical, and overhead positions and gain skills in layout, fabrication, reading engineering drawings and pipe welding. The program also provides training for students to prepare for AWS D1.1 certification. Competencies will be assessed regularly in accordance with criteria established by the American Welding Society (AWS), the American Petroleum Institute, the American Society of Mechanical Engineers and the American National Standards Institute.

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

Course	Title
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**Required Core: 8 units**

WELD 1	Introduction to Welding Process (8)
WELD 10A	Introduction to Shielded Metal Arc Welding (SMAW) (4)
WELD 10B	Intermediate Shielded Metal Arc Welding (SMAW) (4)

**15 units from:**

WELD 10C	Advanced Certification and Career Preparation Lab (2)
WELD 40A	Introduction to Gas Tungsten Arc Welding (GTAW) (3)
WELD 40B	Intermediate Gas Tungsten Arc Welding (GTAW) (3)
WELD 40C	Advanced Gas Tungsten Arc Welding (GTAW) Skills Lab (2)
WELD 45	Structural Fabrication (5)

**Total Units: 23**

**Recommended Electives:**

CADD 5	Introduction to Mechanical Drafting (3)
MTT 16	General Metals (3)
WELD 15	Basic Welding for Allied Fields (3)
WELD 23	Advanced Arc Welding Specialty Lab (2)
WELD 28	American Welding Society (AWS) D1.1 Certification Test Preparation (3)

Note: Students granted course credit for Welding 10A or Welding 40A may take an elective to satisfy the unit requirement for the degree and certificate.

### Certificate of Achievement

A Certificate of Achievement will be granted upon completion of all program requirements. At least 50 percent of the courses required for the certificate must be completed at El Camino College.

### Welding Certificate of Achievement

Course	Title
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**Required Core: 8 units**

WELD 1	Introduction to Welding Process (8)
WELD 10A	Introduction to Shielded Metal Arc Welding (SMAW) (4)
WELD 10B	Intermediate Shielded Metal Arc Welding (SMAW) (4)

**16 units from:**

WELD 10C	Advanced Certification and Career Preparation Lab (2)
WELD 28	American Welding Society (AWS) D1.1 Certification Test Preparation (3)
WELD 40A	Introduction to Gas Tungsten Arc Welding (GTAW) (3)
WELD 40B	Intermediate Gas Tungsten Arc Welding (GTAW) (3)
WELD 45	Structural Fabrication (5)

**2 units from:**

WELD 23	Advanced Arc Welding Specialty Lab (2)
WELD 40C	Advanced Gas Tungsten Arc Welding (GTAW) Skills Lab (2)

**Total Units: 26**

Note: Students granted course credit for Welding 10A or Welding 40A may take an elective to satisfy the unit requirement for the degree and certificate.

For Gainful Employment program information, please visit  
[www.elcamino.edu/academics/indtech/welding/](http://www.elcamino.edu/academics/indtech/welding/)

**Welding 1****Introduction to Welding Process***8 units; 5 hours lecture, 10 hours lab**Credit, degree applicable**Transfer CSU*

In this course, students are introduced to welding processes with a primary focus on developing manipulative skills. Welding processes covered include oxy-acetylene, plasma arc, shielded metal arc, gas tungsten arc, gas metal arc, and flux cored arc. The course also includes a study of occupational safety, weld symbols, print reading, metal fabrication, and joint design.

**Welding 10A****Introduction to Shielded Metal Arc Welding (SMAW)***4 units; 2.5 hours lecture, 5 hours lab**Credit, degree applicable**Transfer CSU*

This course is designed for the beginning student. Students will develop manipulative skills using the oxy-gas and Shielded Metal Arc Welding (SMAW) processes. Emphasis is placed on safety procedures, use of manual and semi-automatic welding equipment, welding techniques, electrodes and joints. Practical aspects of Flux Core Arc Welding (FCAW) process will be introduced.

*Note: Letter grade or pass/no pass option.***Welding 10B****Intermediate Shielded Metal Arc Welding (SMAW)***4 units; 2.5 hours lecture, 5 hours lab**Recommended Preparation: Welding 10A**Credit, degree applicable**Transfer CSU*

This course is designed for the intermediate student. Students will enhance their skills by developing their technique in the open root processing using Shielded Metal Arc Welding (SMAW) electrodes. The course emphasizes the theory and practice of joint preparation, Complete Joint Penetration (CJP), and various cover pass processes including semi-automatic arc welding.

*Note: Letter grade or pass/no pass option.***Welding 10C****Advanced Certification and Career Preparation Lab***2 units; 6 hours lab**Prerequisite: Welding 10B with a minimum grade of C or equivalent**Credit, degree applicable**Transfer CSU*

This advanced level welding lab is third of a series specifically designed for students to refine their welding skills in E7018 electrodes used in structural steel Shielded Metal Arc Welding (SMAW), Flux Core Arc Welding (FCAW), and E6010 electrodes used in open root welding of ferrous metals in the vertical (3G) and overhead (4G) position. Taken in succession, this course prepares students to advance to level III in American Welding Society (AWS) national skill standards.

*Note: Letter grade or pass/no pass option.***Welding 15***(formerly 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 to support trade skills for students in allied fields. The course introduces students to welding equipment, nomenclature, safety, plasma and mechanical cutting, metallurgical exploration of ferrous and non-ferrous material, ductility of materials, effects of cold-working and heating treating.

**Welding 23***(formerly Welding 23abc)***Advanced Arc Welding Specialty Lab***2 units; 6 hours lab**Prerequisite: Welding 5 or Welding 21 with a minimum grade of C in prerequisite or equivalent**Credit, degree applicable**Transfer CSU*

This advanced level welding course is designed to further develop advanced specialized welding skills in the structural, sheet metal, and construction industries. This course is for the advanced arc welding student preparing for the American Welding Society (AWS) Structural Steel practical exam and certification.

*Note: Letter grade or pass/no pass option.***Welding 28***(formerly Welding 28ab)***American Welding Society (AWS) D1.1****Certification Test Preparation***3 units; 3 hours lecture**Prerequisite: Welding 5 or Welding 21 with a minimum grade of C or equivalent**Credit, degree applicable**Transfer CSU*

This course will prepare the student to pass the written examination of the Los Angeles City Department of Building and Safety Structural Steel American Welding Society (AWS) D1.1 examination. Both the midterm and final examinations will be administered under same testing conditions as the actual Los Angeles City written exam.

*Note: Letter grade or pass/no pass option.***Welding 29****Blueprint Reading***3 units; 3 hours lecture**Credit, degree applicable**Transfer CSU*

This course is designed to provide principles of reading and interpreting basic industrial prints and shop drawings as applied to the welding trade. Emphasis is placed on shape identification, nomenclature, and welding symbols.

**Welding 40A**

(formerly Welding 40)

**Introduction to Gas Tungsten Arc Welding (GTAW)**

3 units; 2 hours lecture, 4 hours lab

Credit, degree applicable

Transfer CSU

This course is designed for the beginning student. Students develop manipulative skills using the Gas Tungsten Arc Welding (GTAW) process on ferrous and non-ferrous alloys. Related classroom instruction covers technical data pertaining to this welding process with special emphasis on operational parameters of inverter type machines. This course begins preparation for eligibility for American Welding Society (AWS) D17.1 certification.

**Welding 40B****Intermediate Gas Tungsten Arc Welding (GTAW)**

3 units; 2 hours lecture, 4 hours lab

Recommended Preparation: Welding 40A

Credit, degree applicable

Transfer CSU

This is an intermediate course in Gas Metal Arc Welding (GTAW). Special emphasis is placed on the welding of ferrous and non-ferrous metals in the various positions and building skill development in GTAW. This course continues student preparation toward the American Welding Society (AWS) D17.1 certification.

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

**Welding 40C****Advanced Gas Tungsten Arc Welding (GTAW)****Skills Lab**

2 units; 6 hours lab

Prerequisite: Welding 40B with a minimum grade of C or equivalent

Credit, degree applicable

Transfer CSU

This course is designed to develop the advanced specialized skills used within the structural steel, sheet metal, and aerospace manufacturing industries using the Gas Tungsten Arc Welding (GTAW) process. Repair of cast welding and tooling maintenance will be introduced. Students will develop various specialized skills that will help achieve students' goals and attain the necessary traits that employers are seeking. This course prepares students for American Welding Society (AWS) D17.1 certification.

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

**Welding 45**

(formerly Welding 45ab)

**Structural Fabrication**

5 units; 4 hours lecture, 4 hours lab

Prerequisite: Welding 1 or Welding 21 with a minimum grade of C in prerequisite

Credit, degree applicable

Transfer CSU

This welding course focuses on skills required to fabricate a project from an engineering drawing to the finished product. Emphasis is placed on interpreting engineering drawings, proper use of tools and equipment, math, and shop safety.

**Welding 95**

(formerly 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\*

Through a set of learning objectives established by the student, supervisor, and instructor, each student will work with and learn from experts in the Welding field. These experiences will enable students to improve job skills, analyze career opportunities and requirements, and compare them to personal abilities and career expectations.

*\*Note: Transfer limitations apply.*

*Note: The total units earned for Cooperative Work Experience Education may not exceed 16 units.*

**Welding 99**

(formerly 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\*

This course provides special advanced studies in a subject field of Welding not covered in the regular departmental offerings. Regular conferences with the instructor are coordinated with assigned Welding projects (54 hours per unit).

*\*Note: Transfer limitations apply.*

*Note: For eligibility requirements, go to*

*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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## Women's Studies

### Women's Studies 1

*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

## Administration

**Dena Maloney**  
*Superintendent/President*

**Linda Beam**  
*Vice President, Human Resources*

**Jo Ann Higdon**  
*Vice President, Administrative Services*

**Jeanie Nishime**  
*Vice President,  
Student and Community Advancement*

**Barbara Perez**  
*Vice President,  
El Camino College Compton Center*

**Jean Shankweiler**  
*Vice President, Academic Affairs*

## Deans

**Jose Anaya**  
*Community Advancement*

**Constance Fitzsimons**  
*Fine Arts*

**William Garcia**  
*Student Support Services*

**Amy Grant**  
*Natural Sciences*

**Thomas Lew**  
*Humanities*

**Gloria Miranda**  
*Behavioral and Social Sciences*

**Rory Natividad**  
*Health Sciences and Athletics*

**Dipte Patel**  
*Counseling and Student Success*

**Virginia Rapp**  
*Business*

**Stephanie Rodriguez**  
*Industry and Technology*

**Jacquelyn Sims**  
*Mathematical Sciences*

## Associate Deans

**Mary Beth Barrios**  
*Counseling and Student Success*

**Linda Clowers**  
*Academic Affairs*

**Walter Cox**  
*Fine Arts*

**Randal Davis**  
*Industry and Technology*

**Elise Geraghty**  
*Humanities*

**Linda Ternes**  
*Mathematical Sciences*

## Directors/Managers

**Michelle Arthur**  
*Student Support Services*

**Roberta Becka**  
*Grants Development and Management*

**Rocky Bonura**  
*Business Services*

**Julie Bourlier**  
*Bookstore*

**Thomas Brown**  
*Facilities Planning and Services*

**Rick Christophersen**  
*Center for the Arts*

**Robin Dreizler**  
*Outreach and School Relations*

**Janice Ely**  
*Business Manager*

**Ann Garten**  
*Community Relations*

**Irene Graff**  
*Institutional Research and Planning*

**Gary Greco**  
*Special Resource Center*

**Melissa Guess**  
*Financial Aid*

**Edith Gutierrez**  
*EOPS/ CARE/CalWORKS*

**Arturo Hernandez**  
*Mathematics, Engineering,  
Science Achievement (MESA)*

**Jaynie Ishikawa**  
*Staff and Student Diversity*

**Arthur Leible**  
*Information Technology Services*

**Lynn Lindberg**  
*Human Resources*

**Wanda Morris**  
*Nursing*

**William Mulrooney**  
*Admissions and Records*

**Colin Preston**  
*Athletics and Kinesiology*

**Rebecca Russell**  
*Library & Learning Resources*

**Gregory Toya**  
*Student Development*

**Michael Trevis**  
*Chief of Police/Public Services  
Instructional Programs*

## Assistant Directors

**Robert Brobst**  
*Facilities, Planning and Services*

**David Brown**  
*EOPS/CalWORKs/CARE*

**Sheryl Kunisaki**  
*Library & Learning Resources*

**Kristina Martinez**  
*Financial Aid*

**Andrew Nasatir**  
*Bookstore*

**Esperanza Nieto**  
*Admissions and Records*

**Betty Sedor**  
*Community Education and Development*

**William Warren**  
*Information Technology Services*

## Specially Funded Programs

**Eldon Davidson**  
*Director, Contract and Community Education*

**Andrea Sala**  
*Executive Director  
El Camino College Foundation and  
Scholarships*

**Phillip Sutton**  
*Director, Workplace Learning  
Resource Center*

**Nancy Tonner**  
*Assistant Director  
El Camino College Foundation and  
Scholarships*

**Starleen Van Buren**  
*Director, Small Business Services*

**Vacant**  
*Director, Center for Applied  
Competitive Technologies*



## 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 to recognize professional preparation and experience. It is a traditional practice among the faculty and is not an official appointment by the Board of Trustees.

Qualifications for academic rank are based on these requirements:

**Instructors** are adjunct or temporary faculty who have taught fewer than 10 semesters at the College.

**Adjunct Assistant Professors** are adjunct or temporary faculty who have taught 10 or more semesters at the College.

**Assistant Professors** are contract (i.e., probationary) faculty.

**Associate Professors** are regular (i.e., permanent) faculty who have been granted tenure.

**Professors** are tenured faculty with at least one year's experience as Associate Professor in Class I-IV who have achieved Step 13 or above, or in Class V who have achieved Step 10 or above.

**Professors Emeriti** are tenured faculty who retire in good standing.

## Academic Senate Officers

**President:**  
*Kristie Daniel-DiGregorio*

**VP ECC Compton Center:**  
*Paul M. Flor*

**Curriculum Chair:**  
*Allison Carr*

**VP Academic Technology:**  
*Pete Marcoux*

**VP Educational Policies:**  
*Alice Martinez*

**VP Faculty Development:**  
*Kristie Daniel-DiGregorio*

**VP Finance and Special Projects:**  
*Lance Widman*

**VP Instructional Effectiveness:**  
*Karen Whitney*

**Secretary:**  
*Sara Di Fiori*



## A

**Abbani, Mohamad (2012)**  
*Assistant Professor, Chemistry*  
A.A. Mt. San Antonio College  
B.S., Ph.D. University of California, Los Angeles

**Abdelhamid, Mohammed (2006)**  
*Adjunct Assistant Professor, Psychology*  
B.A. Cairo University  
M.A. California State University, Los Angeles

**Abdul-Jabbaar, Aminah (2005)**  
*Adjunct Assistant Professor, Film/Video*  
B.A. University of Southern California  
M.F.A. University of California, Los Angeles

**Ackerman, Amanda (2006)**  
*Adjunct Assistant Professor, English*  
B.A. Wellesley College  
M.F.A. California Institute of the Arts

**Adamis, Elizabeth (2013)**  
*Assistant Professor, Dance*  
B.S. State University at Crockport, NY  
M.F.A. California Institute of the Arts

**Adoc, Raymund (2009)**  
*Adjunct Assistant Professor, Respiratory Care*  
A.S. El Camino College  
B.S. University of Santo Tomas, Philippines

**Ahmadpour, Alireza (2004)**  
*Professor, Art*  
B.S. Pars High Institute  
M.A. California State University, Los Angeles

**Ahn, Rebecca (1996)**  
*Adjunct Assistant Professor, Japanese*  
B.F.A. University of Washington  
M.A. Biola University  
M.A. University of Southern California

**Alamillo, Lucy (2000)**  
*Professor, Art*  
B.A. University of Northern Iowa  
M.A. University of Southern California

**Alcocer, Brandon (2008)**  
*Adjunct Assistant Professor, Physical Education*  
B.S. California State University, Northridge  
M.A. California State University, Fresno

**Allen, Amy (2011)**  
*Adjunct Assistant Professor, Dance*  
B.A. Loyola Marymount University  
M.F.A. University of California, Irvine

**Allen, Stacey (1999)**  
*Professor, Sociology*  
B.A. California State University, Long Beach  
M.A. California State University, Dominguez Hills

**Almo, Laura (2014)**  
*Assistant Professor, Film/Video*  
B.A. University of California, Berkeley  
M.A. Stanford

**Almos, Carolyn (2010)**  
*Adjunct Assistant Professor, Theatre*  
B.A. Whitman College  
M.F.A. California Institute of the Arts

**Altermatt, Robert (2006)**  
*Adjunct Assistant Professor, Chemistry*  
B.A., M.S. California State University, Long Beach

**Alvillar, Andrew (2013)**  
*Assistant Professor, Physical Education*  
A.A. El Camino College  
B.A. Sonoma State University  
M.S. Azusa Pacific University

**Anaya, Jose (2008)**

*Dean, Community Advancement*  
B.S. California State Polytechnic University,  
Pomona  
M.B.A. University of Southern California

**Anderson, Michael (2014)**

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**Andrade, Argelia (2014)**

*Assistant Professor, Spanish*  
B.A., M.A., Ph.D. University of California, Los  
Angeles

**Annick, Jennifer A. (2001)**

*Professor, English, Reading*  
B.A. Fairfield University  
M.A. Loyola Marymount University

**Antoine, Ellen R. (1988)**

*Professor, Political Science*  
B.A. Tulane University  
M.A., Ph.D. Johns Hopkins University

**Antrim, Craig K. (1974)**

*Adjunct Assistant Professor, Art*  
B.A. University of California, Santa Barbara  
M.F.A. Claremont Graduate School

**Arasasingham, Premilla (2006)**

*Adjunct Assistant Professor, Chemistry*  
B.S. University of California, Davis  
M.S. University of California, Irvine  
M.B.A. Pepperdine University

**Armao, Eugene (1989)**

*Professor, English*  
B.A. University of Pennsylvania  
M.A. University of Southern California

**Arnold, Mark S. (1991)**

*Adjunct Assistant Professor, Administration  
of Justice*  
B.S. California State University, Los Angeles  
J.D. Southwestern University School of Law,  
Los Angeles

**Arrieta, Jose (2014)**

*Adjunct Assistant Professor, History, Ethnic  
Studies*  
B.A., M.A. California State University, Los Angeles

**Ashley, Vera Bruce (2008)**

*Professor, Fashion*  
B.A. Pepperdine University  
M.A. University of California, Los Angeles  
Ed.D. University of San Diego  
Industry experience

**Avakyan, Vage (2003)**

*Adjunct Assistant Professor, Mathematics*  
M.S. Yerevan State University  
Ph.D. Moscow State University

**Avila, Adalinda (2006)**

*Adjunct Assistant Professor, Mathematics*  
B.S., M.S. California State University, Los Angeles

**B****Bachmann, Susan (1988)**

*Professor, English*  
B.A., Ph.D. State University of New York  
M.A. University of Wisconsin

**Bacon, Dave (2007)**

*Adjunct Assistant Professor, Physical Education*  
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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*  
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Aoto, Shirley, 1980-2002, *Accounting*  
Arce, Francisco M., 2006-2015, *Vice President,  
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Brown, Gerald W., 1948-1978, *Sociology*  
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 Codey, Robert, 1965-1998, *Architecture*  
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 Durfey, Cline, 1965-1981, *Dean, Business Education*  
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 Hilton, Wayne, 1957-1982, *Electronics*  
 Hironaka, Hiram T., 1983-2015, *Automotive Technology*  
 Hodges, Hugh T., 1968-1996, *History*  
 Hoover, Marlene L., 1980-2006, *Law*  
 Horn, Jack, 1976-2004, *Horticulture*  
 Horvath, Robert L., 1969-2015, *Mathematics*  
 Houston, R. Daniel, 1974-2010, *English*  
 Hughes, Richard C., 1983-2013, *Computer Aided Design/Drafting*  
 Hufstetler, Nancy, 1969-1990, *Nutrition and Foods*  
 Hunt, Carmen, 1980-2013, *Communication Studies*  
 Hurlburt, Dolores, 1970-2003, *Nursing*  
 Husmann, Ann L., 1976-1998, *Child Development*  
 Hymen, Joseph, 1977-2012, *Mathematics*  
 Ichinaga, Moon, 2001-2016, *Librarian*  
 Imai, Carol K., 1977-2010, *Counseling*  
 Irizarry, Arturo, 1989-2001, *Dean, Student Services*  
 Isbell, Judith H., 1966-1997, *Nursing*  
 Jackson, Brenda, 1993-2013, *Counseling*  
 Jackson, Nathaniel, 1974-1992, *Dean, Applied Sciences*  
 Jackson, Thomas, 1994-2010, *Associate Dean, Industry and Technology*  
 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, 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*  
 Kadomoto, Norman, 1985-2011, *Physics*  
 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*  
 Keenan, Jack E., 1976-2011, *Business*  
 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*  
 Knyprstra, Phillip B., 1973-2000, *Accounting*  
 Kobashi, Robert I., 1970-2010, *Art*  
 Kokaska, Sharen, 1988-2005, *Educational Development*  
 LaCoe, Amy, 2000-2007, *Counseling*  
 LaFond, Ronald, 2005-2016, *Horticulture*  
 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, *Physics*  
 Leonelli, Stephen, 1992-2016, *Biology*  
 Levine, Abraham, 1972-1999, *Sociology*  
 Lewis, Jessie, 1956-1976, *Cosmetology*  
 Lewis, John J., 1976-2011, *Automotive Technology*  
 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*  
 Lugo, Albert, 1988-2011, *Administration of Justice*  
 Macaray, Lawrence R., 1962-1967, *Art*  
 Mack, James E., 1964-1998, *Music*  
 Maier, Robert O., 1955-1991, *Mathematics*  
 Maler, Norbert E., 2005-2016, *Accounting*  
 Manahan, Nancy, 1960-1983, *Physical Education*  
 Manly, Myrna F., 1992-2001, *Mathematics*  
 Marron, Susan, 1999-2016, *Sign Language/Interpreter Training*  
 Marshall, Marie Y.S., 1974-1994, *Psychology*  
 Marston, Douglas, 1984-2014, *Electronics and Computer Hardware Technology*  
 Martinelli, John T., 1973-2007, *Business*  
 Martinez, Edward, 1984-2013, *Librarian*  
 Martinez, Maria Teresa, 2008-2014, *Nursing*  
 Mays, Louis, 1955-1985, *Spanish*  
 Mazak, Ruth J., 1947-1980, *Counseling*  
 McCallum, Victoria, 1998-2015, *English*  
 McCoard, Fern, 1959-1979, *Business*  
 McCrary III, Edward R., 1976-2006, *Psychology*  
 McLeod, Robert S., 1976-2011, *Chemistry*  
 Merzjak, Florence, 1951-1977, *German*  
 Medigovich, Lori, 1989-2013, *Journalism*  
 Meza, Timothy, 1984-2010, *Construction Technology*  
 Miller, Maureen, 1975-2001, *English/Reading*  
 Miller, Timothy D., 1977-2014, *Accounting*  
 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, E. Elaine, 1982-2013, *Counseling*  
 Moran-Wisdom, Olga C., 1979-2004, *Fashion*  
 Morimoto, Takiko, 1990-2012, *Japanese*

- Moxley, Marion T., 1963-1999, *Political Science*  
 Mracek, Jan, 1963-1981, *Technical Illustration*  
 Muck, Steven, 1964-1997, *Counseling*  
 Myers, Robert, 1966-1994, *Physical Education*  
 Nemie, Vivian P., 2005-2016, *Cosmetology*  
 Nelson, June Lusk, 1956-2007, *Music*  
 Nelson, Thomas E., 1999-2008, *Physical Education*  
 Niemczycki, Stanley, 1970-2004, *Computer Information Systems*  
 Nosworthy, Hedley, 1991-2014, *Music*  
 Nothorn, Stephen G., 2000-2007, *Fire and Emergency Technology*  
 O'Brien, Katherine, 1966-1990, *English*  
 Oda-Omori, Susan, 1989-2016, *Counseling*  
 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*  
 Palmer, Albert, 1958-1985, *Architecture*  
 Parks, Claudette, 1997-2014, *Reading*  
 Parvis, Sandra, 2001-2013, *Child Development Center Director*  
 Patterson, David S., 1971-2004, *Art*  
 Pelsinger, Myron, 1957-1987, *History*  
 Perinetti, Dale, 1991-2012, *Mathematics*  
 Perry, William E., 1965-1999, *German*  
 Pesusich, Doreen J., 1965-1997, *Physical Education*  
 Peterson, Warren, 1947-1987, *Mathematics*  
 Piffner, 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*  
 Rader, Emily, 1999-2016, *History*  
 Rang, Francis B., 1984-2015, *Spanish*  
 Raufman, Lisa, 1997-2014, *Counseling*  
 Riggs, Shirley G., 1973-1990, *Librarian*  
 Rhodes, Mary Ann, 1971-1979, *Cosmetology*  
 Roberts, Joanne L., 1965-1983, *Psychology*  
 Robles, Marisa, 1953-1979, *Power Sewing*  
 Robles, Vincent L., 1990-2012, *Librarian*  
 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*  
 Sampson, Allen, 1989-2011, *Mathematics*  
 Santelman, Pamela, 2005-2014, *Dance*  
 Savage, Nancy, 1966-1990, *English*  
 Scarlett, Norman H., 1949-1981, *Behavioral Science*  
 Scarpitta, Yvonne, 1966-1985, *Art*  
 Scharlin, Lester, 1972-2013, *Microbiology*  
 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*  
 Scott, Gregory L., 1989-2015, *Computer Science, Mathematics*  
 Seares, Suzanne, 1966-2001, *Physical Education*  
 Seitz, Philip, 1957-1985, *Business*  
 Semeraro, Mary, 1966-1993, *Physical Education*  
 Seyedin, Massood, 1986-2012, *Mathematics*  
 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*  
 Sinopoli, Louis M., 1979-2014, *Respiratory Care*  
 Skinner, Virginia, 1954-1985, *Mathematics*  
 Smith, Anne, 1958-1985, *Psychology*  
 Smith, Catherine, 1960-1976, *Chemistry*  
 Smith, John D., 1976-1993, *Spanish*  
 Southstone, Raymond, 1958-1985, *Physical Education*  
 Spearman, Terry, 1990-2006, *Academic Strategies, Human Development*  
 Spyr, E. Jean, 1968-1992, *Nursing*  
 Stanich, George, 1955-1992, *Physical Education*  
 Stauber, Kriss, 1981-2010, *Office Administration*  
 Steffey, Lois, 1951-1984, *Business*  
 Stephens, Kathleen, 1992-2015, *Nursing*  
 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*  
 Strehlike, 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, Mercedes, 1984-2012, *Spanish*  
 Thompson, Jacquelyn, 1999-2014, *Computer Information Systems*  
 Thompson, Robert, 1950-1983, *Economics*  
 Thorsen, Thomas, 1964-1999, *Mathematics*  
 Thureson, Joan I., 1971-2012, *Philosophy*  
 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*  
 Underwood, Grace K., 1975-1999, *Psychology*  
 Ursich, Joseph P., 1963-1990, *Drafting Technology*  
 Vander Stucken, Frances E., 1999-2005, *Nursing*  
 Van Enoo, Sharon, 1984-2012, *Academic Strategies*  
 Van Lue, Nick, 1991-2009, *Physical Education*  
 Vincent, William, 1962-1993, *Physical Education*  
 Visintainer, Donald J., 1974-2003, *Radiologic Technology*  
 Wapner, Leonard M., 1974-2014, *Mathematics*  
 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*  
 Wissman, Frank, 1954-1985, *Administration of Justice*  
 Wood, Ronald, 1970-2001, *Psychology*  
 Woolever, Charles, 1981-1994, *Construction Technology*  
 Wozniak, Paul, 1977-2012, *Mathematics*  
 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*  
 Zartman, Charleen, 1977-2012, *Physical Education*  
 Zion, Kenneth R., 1982-2010, *Automotive Collision Repair/Painting*  
 Zuck, Richard, 1976-1999, *Chemistry*



El Camino College  
Compton Center

2016-2017 | CATALOG



**El Camino College  
Compton Community Educational Center**

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## El Camino College Compton Community Educational Center

### 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. After many successful years, and several challenging years, in June 2005 the Accrediting Commission for Community and Junior Colleges announced its decision to revoke Compton College's accreditation.

In August 2006, the El Camino Community College District Board of Trustees approved a Memorandum of Understanding to provide educational and related support services to the Compton Community College District residents.

El Camino College provides accredited instructional and related support, in addition to administrative services, to meet the needs of ECC Compton Center students. El Camino College courses are taught at El Camino College Compton Center by Compton Center faculty.

Through the agreement, residents of the Compton Community College District continue to have access to university transfer and career and technical education opportunities, as well as financial aid, basic skills courses and related support services, right in their own neighborhood.

Administration at ECC Compton Center is led by Dena P. Maloney, Ed.D., Superintendent/President of the El Camino Community College District. Barbara Perez, Vice President, ECC Compton Center, oversees daily operations. Keith Curry is Provost of ECC Compton Center, providing leadership in the planning, development, and implementation of the district's instructional and student services programs.



## Admission Requirements

### Admission

Anyone 18 years of age or older, not prohibited by law, qualifies for admission to El Camino College Compton Center. 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 Compton Center may admit as a special part-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. Admission as a special part-time student for anyone in grades 11 or 12 is subject to the requirements and limitations of El Camino College Board Policy 5060 and Administrative Procedure 5011.

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

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

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

### California Residency Definition

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

### California Residence Waiver

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

### Residence Requirements

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

### Exceptions to Residence Determination

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

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

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

### Appeal Procedure

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

### Concurrent Enrollment of K-12 Students

(Refer to page 13)

### F-1 Visa Procedure International Students

(Refer to page 13)

## Student Success Support Program

### Student Success Support Program

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

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

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

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

### Steps to Enrollment

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

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

#### Step 2. Prepare and test

Placement is based on multiple measures, including assessment tests. It is important to prepare for the assessment tests by reviewing material prior to taking the test. Preparation material is available online at [www.compton.edu/student-services/support-services/assessment-center/](http://www.compton.edu/student-services/support-services/assessment-center/).

Take appropriate placement tests and consult with an academic counselor. Placement testing is available in the Assessment Center, located in D-26. English, ESL, and mathematics assessment should be completed before attempting to register in classes. Please read the "Assessment Procedures" on the following page, for more information about specific placement or specialized tests.

Students must have transcripts or grade slips from all colleges attended before making a counseling appointment. English, mathematics, or other courses completed with a grade of "C" or better at an accredited college may be used to meet prerequisites or corequisites if the completed courses are equivalent to El Camino College Compton Center courses. High school transcripts may be used as part of multiple measures. Official transcripts must be mailed from each high school, college or university to the El Camino College Compton Center Admissions and Records Office. Hand carried transcripts are not accepted by the Admissions and Records Office.

#### Step 3: Participate in New Student Orientation at El Camino College Compton Center

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

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

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

For the non-matriculant student:

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

### Orientation

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

## Assessment/Testing

Students are highly encouraged to review or prepare before taking placement tests. Students' performance on the placement tests determines the course level in which they will enroll. Information regarding the tests and preparation is available at: [www.compton.edu/studentservices/supportservices/assessmentcenter/](http://www.compton.edu/studentservices/supportservices/assessmentcenter/).

### 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 Compton Center application on file. Next, complete your placement tests at the Assessment/Testing Center located in Room D-26. A photo I.D., such as a driver's license, and 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 registering for courses. Re-testing is limited and may not be done after enrollment into any course related to the test.

### English Placement Test

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

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

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

### English as a Second Language (ESL) Test

Complete the English as a Second Language (ESL) Levels of English Proficiency (LOEP) Placement Test at least one day before attempting to enroll in an ESL credit course that has a course level as a prerequisite, corequisite or recommended preparation. The test is comprised of a computerized reading test (20 questions), a writing sample, and a five-minute oral interview. For non-academic credit ESL courses, complete the ESL Combined English Language Skills Assessment (CELSA) Placement Test at least one day before attempting to enroll into any ESL non-credit course that has a course level as a prerequisite, corequisite or recommended preparation. This test is a written exam comprised of 75 questions. Students that require further review of their placement recommendation should see the ESL coordinator.

### Mathematics Placement Test

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

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

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



## Specialized Tests

### Chemistry Placement Test

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

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

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

### Mathematics Competency Test

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

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

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

### ATB (Ability-To-Benefit) Test

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

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

### Waiver Exam for Contemporary Health

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

After receiving the test results, a student may request further review of their placement recommendation. Information is available from the Assessment Center.

## Educational Planning

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



## Registration for Classes

### Open Enrollment

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

### Email Accounts and the Portal

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

john\_doe@elcamino.edu

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

### Registration Information

#### Registration Procedure

Each student is required to have a registration appointment before being permitted to register. Registration appointments are issued by the Admissions and Records Office and indicate the day and hour after which students may register. 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 session, the College publishes a Schedule of Classes listing the courses offered and general registration procedures. Schedules are available online at [www.compton.edu/student-services/admission-and-records/ClassSchedule.aspx](http://www.compton.edu/student-services/admission-and-records/ClassSchedule.aspx) and may also be obtained at the Bookstore for a nominal fee. A searchable class schedule showing open and available classes is also available online.

### Priority Registration

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

#### Limitations

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

Enrollment may also be limited due to the following:

- A. Health and safety considerations
- B. Facility limitations
- C. Faculty workload
- D. Availability of qualified instructors
- E. Funding limitations
- F. Constraint of regional planning
- G. Legal requirements imposed by statutes, regulations, or contracts

### Registration Priorities

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

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

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

**Priority Level 3** - Eligible students in district designated groups

**Priority Level 4** - Eligible in-district new students

**Priority Level 5** - Eligible continuing students

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

**Priority Level 7** - Other new or returning students

**Priority Level 8** - K-12 concurrently enrolled students

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

**Priority Level 10** - Reinstated dismissed students

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

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

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

### **Continuous Enrollment for Priority Registration**

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

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

#### **Priority Level 1 - Veterans and Foster Youth**

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

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

#### **Priority Level 3 - District-designated Priority Groups**

The student cohorts in Tier Three are members of a cohort approved by the El Camino Community College District Board of Trustees to receive priority registration. For the purposes of priority enrollment, these groups shall be treated equally.

#### **Priority Level 4 - Eligible In-District New Students**

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

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

#### **Priority Level 5 - Continuing Students**

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

#### **Priority Level 6 - Other Eligible New/Returning Students**

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

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

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

#### **Priority Level 8 - K-12 Concurrently Enrolled Students**

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

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

1. Probation: Continuing students who are on academic or progress probation for two consecutive primary terms.

## 2. 100-Unit Limit

- a. Continuing students who have earned one hundred (100) or more degree applicable semester units at El Camino College or the El Camino College Compton Center
- b. Exemptions from 100-unit limit: Units for non-degree applicable English as a Second Language or basic skills courses are exempted from the 100-unit limit.

### Priority Level 10 - Reinstated from Dismissal

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

## Registration Time Allowance

### 1. Scheduled Appointment Time

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

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

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

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

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

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

## Unit Limitations

The student's program of studies will vary according to individual need and objectives. The maximum full-time student program for a semester is 18 units without a physical education class and 19 units with a physical education class. The maximum program of study for summer session is nine units without a physical education class or 10 units if at least one unit is in physical education. 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 Compton Center with a 2.75 grade point average and an overall grade point average of 2.5 or higher to be eligible for an overload.

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

## Full-Time Student

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

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

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

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

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

## Attendance

### Attendance at First Class

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

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

### Attendance Without Official Enrollment

Students will not be permitted to attend classes in which they are not officially registered. Exceptions may be allowed by the instructor for bona fide visitors. Students who attend a class without proper enrollment (the student did not properly register or add the class) by the published deadline will not be permitted to "late add" the class except for documented extenuating and mitigating circumstances. Students who do not properly register or add a class will receive neither unit or grade credit for that class.

### Attendance During Semester

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

### Adding a Class

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



### Filled and Cancelled Classes

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

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.

### Withdrawal from Class

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

### Dropping a Class

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

### Attendance by Non-registered Students

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

## Auditing of Courses

Education Code Section 76370 permits the Board of Trustees to authorize a person to audit a community college course.

A student may audit selected El Camino College courses with following provisions:

1. Priority in class enrollment shall be given to students desiring to take the course for credit toward a degree or certificate. Auditing a course is on a space-available basis.
2. No student auditing a course shall be permitted to change his or her enrollment in that course to receive credit for the course. Students will not be permitted to earn credit by examination for audited courses.
3. A student wishing to audit a course must first obtain a petition to audit form in the Admissions Office. Registration for audit will occur no sooner than the second week of classes.
4. The audit of a class is subject to the approval of the instructor of the course and the dean of the academic division. Neither the instructor nor the dean is obligated to approve an audit.

Fee for auditing a class shall be \$15 per unit per semester (subject to change). Students enrolled in classes to receive credit for 10 or more semester credit units shall not be charged a fee to audit three or fewer semester units per semester. Fees are to be paid before attending the class and are non-refundable.

## Children in Classrooms

Children are not permitted in classrooms while class is in session. Attendance in class is limited to officially enrolled students and authorized visitors and guests only. Students shall not allow children to be left unattended or unsupervised anywhere on campus. It is the responsibility of each faculty member to inform students of this requirement.



## Student Fees/Refunds/Credits

### Enrollment Fee

El Camino College Compton Center 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 do not pay this required fee at the time of registration may be subsequently dropped from classes, and grades, transcripts, and diplomas will be withheld and future registration restricted. The enrollment fee is \$46 for each unit of credit (subject to change).

Students who are not dropped from courses for non-payment are still liable for all fees unless the student drops the courses by the refund deadline (see Refund section at right). It is the student's responsibility to pay all fees or to drop themselves from their courses by the deadline dates. All fees, including any optional fees, such as a Parking Permit or ASB Student Discount Sticker that may have been requested at the time of registration must be paid by the deadline.

Students on a waitlist for a class must check their El Camino College email DAILY to find out if they have been admitted to the class. If students are admitted to a class from the waitlist, they must pay those class fees on or before the next scheduled deadline period or they will be dropped from all classes, including those already paid for.

It is the student's responsibility to keep informed of his or her waitlist status and to pay any fees due by the scheduled deadlines.

El Camino College Compton Center is part of the system of public higher education of the State of California. The information in this section may be subject to change as a result of new state legislation or requirements of the California Community Colleges Chancellor's Office after the publication date of this catalog.

The enrollment fee requirement does not apply to students enrolled in the non-credit courses specified in Education Code Section 84711.

A student who is in the Temporary Assistance for Needy Families (TANF) Program, the Supplemental Security Income/State Supplementary Program (SSI/SSP), or the General Assistance Program in the Financial Aid Office must apply for the Enrollment Fee Financial Assistance programs in the Financial Aid Office prior to the close of the term in which the student is registered. If any additional documentation is required, it must be submitted to the Financial Aid Office and completed prior to the close of the school term. (Board Policy 5030.2.)

All students interested in applying for financial aid or receiving financial aid need to refer to the information in the financial aid and scholarship section of this catalog.

### Refund of Enrollment/Parking Fees

To receive a refund, students must drop their classes through the online system, *MyECC*, according to deadline dates published in the schedule of classes, the short-term calendar, and on fee receipts. Non-resident tuition refund dates are different. Refer to the **Non-Resident Tuition Refund** section.

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 *MyECC* student portal. Students who drop a class that meets fewer than 15 weeks should consult the short-term calendar for refund deadlines.

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 also 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) a hold being placed on the student's transcript until the financial obligation has been satisfied. A service charge of \$20 will be assessed on any returned check.



## 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 \$242 for every credit unit (subject to annual change each fall semester).

El Camino College Compton Center 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

Non-resident students will receive a full or partial refund for non-resident tuition if they drop their classes through the online system, *MyECC*, according to the following schedule:

1. During the first calendar week of the semester, 100 percent of the fee will be refunded.
2. During the second calendar week of the semester, 75 percent of the fee will be refunded.
3. During the third calendar week of the semester, 50 percent of the fee will be refunded.
4. During the fourth calendar week of the semester, 25 percent of the fee will be refunded.

Refunds for the summer sessions and for short-term courses that meet less than 16 weeks will be granted if classes are dropped according to the following schedule:

1. During the first calendar week of the term, 100 percent of the fee will be refunded.
2. During the second calendar week of the term, 50 percent of the fee will be refunded.

## Parking Fee

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. To avoid receiving a parking citation, students must display both the disabled placard/plates and the El Camino College Compton Center semester permit. Students parking in marked Disabled parking spaces must display their DMV placard only. Temporary medical parking arrangements can be made at the ECC Police Department.

The El Camino Community College District shall not be liable under any circumstances for the loss or damage caused to any vehicle parked on or adjacent to any district property.

## 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, in person at the Admissions and Records Office or online at [www.compton.edu/student-services/admission-and-records/transcripts.aspx](http://www.compton.edu/student-services/admission-and-records/transcripts.aspx). A delay in mailing the transcript may result if a student has outstanding fees or fines against his/her record (library, laboratory, physical education locker, supplies or returned checks). Academic work completed at other colleges will not be included on or with the El Camino College transcript. Academic transcripts and documents from other colleges must be requested from those colleges. The first two El Camino College transcripts are free.

## Student Support Services

### ASB Student Discounts & Student Activities Fee

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.

### Assessment Center

The Assessment Center is located in Room 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 Ability-to-Benefit test.

For additional information, please call the El Camino College Compton Center Assessment Center, 310-900-1600, ext. 2830.

### 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-1).

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 at C-36 and is open from Monday through Thursday, 9:00 a.m. to 5:00 p.m.; and Friday, 9:00 a.m. to 1:00 p.m. ECC Compton Center students may pay fees and purchase parking permits and Associated Student Body (ASB) activity stickers at the Bursar's Office.

### CalWORKs/TANF/GAIN Services

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 from 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:

1. Major or certificate program in a career field with a good economic forecast as approved by Los Angeles County Department of Public Social Services.
2. 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.
3. Participation in required hours of academic and work activity (32 hours weekly).
4. Class Instruction
5. Instructional labs (optional)
6. Work activity related to major (optional); meaningful part-time employment or community service.
7. Satisfactory academic progress in classes - good progress toward completion of a degree or certificate.

#### Services Offered:

##### Priority Registration

**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.

Liaisons with GAIN Service Workers from Department of Public Social Services (DPSS); Regions IV, V, and VI are 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 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, ext. 2071, 2072 or visit the CalWORKs office in VT 153.

## 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, ext. 2902 or visit the office in Building T.

## Cooperative Agencies Resources for Education (CARE)

CARE is a state-funded, supplemental component of EOPS designed to provide educational and career support services and activities for single parents who are academically under-prepared and receiving cash-aid assistance.

## CARE Eligibility Requirements

To qualify for CARE, students must: meet all EOPS eligibility requirements; the child and parent or child is a recipient of CalWORKs/TANF/cash aid (\* Students who receive GAIN services and/or are current CalWORKs students can receive EOPS/CARE); be single head of household and at least 18 years of age; and have one child under the age of 14. The following must be submitted with your CARE application: a copy, not original, of current Verification of Benefits dated within 30 days of submission, and a copy, not original, of youngest dependent's birth certificate.

## Student Responsibilities

Students participating in CARE are required to: meet all EOPS student's responsibilities, attend the CARE Mini Conference, and submit a verification of benefit every semester.

The EOPS/CARE office is located in Room U-6 and the hours are Monday, Tuesday, and Thursday, 8:00 a.m. - 4:30 p.m.; Wednesday, 8:00 a.m. - 6:30 p.m. and Friday, 8:00 a.m. - 12:00 p.m. For more information, contact the EOPS/CARE office at (310) 900-1600 ext. 2912 or visit the website at [www.compton.edu/student-services/eops](http://www.compton.edu/student-services/eops).

## Counseling Services

Counseling services are made available to students through scheduled appointments. Appointments to meet with a counselor are made one week in advance through the Counseling Department, located in the Administration Building. A student who has selected a major area of study is strongly encouraged to see one of the counselors assigned to that area; an undeclared or undecided student may see any counselor.

As an integral part of the Student Success Support program, counseling services are designed to assist students in clarifying career and life goals and in developing an appropriate course of study based on a student's aptitudes, interests, and goals.

Drop-in advisement is normally available Monday through Thursday, 8:00 a.m. to 6:00 p.m.; and Friday, 8:00 a.m. to noon for students who have questions, that 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, ext. 2076 or visit the office in the Administration Building.

## Extended Opportunity Programs and Services (EOPS)

EOPS is a state-funded program designed to assist low-income and educationally disadvantaged students achieve their educational and career goals at El Camino College Compton Center. EOPS provides priority registration, orientation, academic, career and personal counseling services, textbook vouchers, student enhancement workshops, academic achievement grants, educational supplies and other above and beyond services to help students succeed, transfer to a four-year institutions, be competitive in the workforce, and increase retention and enrollment.

### EOPS Eligibility Requirements

To be eligible for EOPS, a student must be a California resident or qualify as a California Dream Act student, be enrolled in 12 units or more at ECC Compton Center, have completed less than 70 degree-applicable units, and demonstrate financial need by qualifying for Board of Governor's Fee Waiver. Students must also have an educational need in one of the following areas: placement scores below English 1A or Math 73; did not graduate from high school; a high school graduate with GPA below 2.5; prior enrollment in remedial courses; other factors as determined by the EOPS director.

### Student Responsibilities

Students participating in EOPS are required to: submit an EOPS Application; complete an EOPS Mutual Responsibility Contract (MRC); complete a Student Educational Plan; maintain academic progress towards a certificate, associate degree, or transfer goal; attend EOPS Orientation; submit Academic Progress Reports every semester; meet with an EOPS Counselor two times per semester; maintain a semester GPA of 2.0; and complete at least 67 percent of coursework each semester.



## Financial Aid

### Financial Aid Office

Room E-17, 310-900-1600, ext. 2935

Hours: Please see the current course schedule for any changes

Monday, Tuesday, Thursday: 8:00 a.m. to 4:30 p.m.

Wednesday: 8:00 a.m. to 6:30 p.m.

Friday: 8:00 a.m. to 12:00 p.m.

Office Hours are subject to change.

The primary goal of the ECC Compton Center Financial Aid Office is to help students achieve their educational potential by providing appropriate financial resources. 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-17). 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.

### Eligible Students

According to CFR Public Law 112-74, effective 7/1/2012, new, first time college students must have a high school diploma, or the recognized equivalent of a high school diploma such as General Education Diploma (GED) a High School Proficiency Exam that the state recognizes as the equivalent of a high school diploma; or completed secondary school in a homeschool setting; or completed at least a two-year program that is acceptable for full credit toward a bachelor's degree; or excelled in high school and admitted into a program of study that leads at least to an associate's degree or its equivalent; or for student enrolled prior to 7/1/2012 demonstrated the ability-to-benefit from the education and training.

### Ability to Benefit (ATB)

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. College students who were enrolled in Federal Title IV programs of study prior to 7/1/2012

at an eligible institution may meet the Ability Benefit requirement by achieving a satisfactory score on the Computerized Placement Test (CPT), Accuplacer. For more information about this test, contact the Assessment Center, Room D-26, phone 310-900-1600, ext. 2830. Additionally, eligible continuing students who were enrolled in an eligible Title IV program of study prior to 7/1/2012 may meet the ATB requirements by completing six college degree applicable units. For additional information, call 310-900-1600, ext. 2935. 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 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 \$46 a unit per semester, based on enrollment status. This is not a cash award to students but is simply a waiver of enrollment fees. Eligible students are not required to pay health fees. To maintain eligibility for the waiver, students must meet academic and progress standards by maintaining a cumulative grade point average (GPA) of 2.0 and must complete more than 50 percent of courses attempted.

### 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 \$46 per unit per semester, based on enrollment. This is not a cash award to students, but is simply a waiver of enrollment fees. The Board of Governors reserves the right to change the enrollment fees and the adjusted gross income financial limits every year. Please check with the Financial Aid Office or the Web page for current year information. To maintain eligibility for the waiver, students must meet academic and progress standards by maintaining a cumulative grade point average (GPA) of 2.0 and must complete more than 50 percent of courses attempted.

### Income Criteria Chart - 2016-2017 Academic Year

Number in Household Family Income 2015 (Including Student) (Adjusted Gross Income or Untaxed Income)

1	\$17,655 or less
2	\$23,895 or less
3	\$30,135 or less
4	\$36,375 or less
5	\$42,615 or less
6	\$48,855 or less
7	\$55,095 or less
8	\$61,335 or less

+ Add \$6,240 for each additional dependent.

You will be asked to provide documentation of income.

### Board of Governors Enrollment Fee Waiver - Method C

For this waiver, students must demonstrate financial need at a minimum of \$1,104 and be legal residents of California. Eligibility is based on the completed FAFSA. Students are awarded \$46 a unit per semester based on enrollment status. This is not a cash award to students, but is simply a waiver of enrollment fees. To maintain eligibility for the waiver, students must meet academic and progress standards by maintaining a cumulative grade point average (GPA) of 2.0 and must complete more than 50 percent of courses attempted.

This information is subject to change pending new regulations. Please check with the Financial Aid Office for any changes in eligibility.

### Academic Standards and Financial Assistance

Students who receive financial assistance are required to maintain satisfactory and measurable academic progress.

A student must complete at least 67 percent of the total number of units they attempt (passed hours divided by attempted hours). All courses with grades of A, B, C, D, or F as well as P, W, I, IP, NP, MW, and repeated courses will be counted towards the total attempted units. Units from other regionally accredited colleges and universities that have been evaluated by the El Camino College Admissions and Records Office and applied to the student's record will also be counted. In addition, a student must maintain a 2.0 cumulative grade point average (GPA). This GPA includes units at El Camino College and those from other regionally accredited colleges and universities that have been evaluated by the El Camino College Admissions and Records Office and applied to the student's academic record at the time a student petitions to graduate. GPA units are those with grades of A, B, C, D, or F. Progress will be reviewed at least once each 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 Handbook or on the Financial Aid web page to clearly understand these standards. Financial aid academic standards should not be confused with the campus academic standards. 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 “expected family contribution number,” the cost of attendance, and the number of units in which you are enrolled.

**Chafee Grant** – Chafee grant recipients may qualify for up to \$5000 a year as long as they are current or former foster youth who have not reached their 22nd birthday as of July 1st of the award year.

**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.

**Full-Time Student Success Grant** – On top of the \$1,656 annual Cal Grant B award paid at community colleges, the Full-Time Student Success Grant pays full-time Cal Grant B recipients an additional \$600 annually. All full-time community college students receiving Cal Grant B will be offered this assistance, and only full-time students can receive this benefit.

**Supplemental Educational Opportunity Grant** – These grants are for students who demonstrate the highest financial need and are used to supplement the Pell Grant.

## 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 first time college 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:

1. College Orientation
2. Early Enrollment
3. Guaranteed Linked Courses
4. On-going Counseling Support
5. Learning Community Model
6. Strategies for Success in College
7. Faculty Collaboration
8. Field Trips
9. Academic Support
10. Peer Mentors

For more information about the First Year Experience Program, please call 310-900-1600, ext. 2761 or visit the office in D-29.

## Library-Student Success Center

### Library

The Library, located on the first floor, is open to the public; however, only currently enrolled ECC Compton Center students may check out materials or reserve books. Also available: library research instruction, library reference services, and group study rooms. During the fall and spring semesters, the library is open Monday through Thursday, 8:00 a.m. to 8:00 p.m.; Friday, 8:00 a.m. to 4:00 p.m.; and Saturday, 9:00 a.m. to 2:00 p.m. The summer session hours vary (please call the library for these hours). The library is closed when classes are not in session. For additional information, call the ECC Compton Center Library at 310-900-1600, ext. 2175.

The library collection includes books, periodicals, and more than a dozen online computer databases. The textbook collection provides materials for use within the library.

### Archive Collection

The archive collection contains photographs, documents, memorabilia and everything related to the Compton Community College District from 1927 to present.

### Art Gallery

Open to the public, the Art Gallery presents a rotating series of exhibits and collections on loan from other institutions as well as student art shows.

### Student Success Center (SSC)

The Student Success Center is located on the second floor, where students have access to three drop-in tutorial centers, including general tutoring, a Math & Science Center, Reading and Writing Center, Faculty Innovation Center, and a new 100 PC computer lab. The Student Success Center also offers a Supplemental Instruction (SI) program, Directed Learning Activities (DLA), academic skills workshops, and peer-led tutoring. During the fall and spring semesters, the centers are open Monday through Thursday, 8:00 a.m. to 8:00 p.m.; Friday, 8:00 a.m. to 4:00 p.m.; and Saturday, 8:00 a.m. to 2:00 p.m. The summer session hours vary (please call the Student Success Center's front desk for these hours). The library is closed when classes are not in session. For additional information, call the ECC Compton Center Student Success Center at 310-900-1600, ext. 2535. **All services are FREE to registered El Camino College Compton Center students.**

### Academic Tutoring

Tutoring is free and available to all ECC Compton Center students. The tutorial program is certified through the highly recognized College Reading and Learning Association. Tutoring is available in various subjects such as anatomy, math, nursing, English, chemistry, Spanish, physiology, English as a Second Language (ESL), and many others. All tutoring sessions are available on a drop-in basis, no appointment necessary.

### Math & Science Center

The Math & Science Center provides free group tutoring on a drop-in basis by trained peer tutors and adjunct faculty tutors. The Math & Science Center sponsors programs to further assist math students. The Math Workshop Series is a set of one-hour workshops presented by tutors covering topics from basic math to college algebra.

The Math & Science Center assists students with the following:

1. Understanding key concepts
2. Reviewing chapter content
3. Building stronger math/science study skills
4. Guiding students through solving math and science problems

All tutoring is conducted in a group-setting environment and collaborative learning is encouraged.

### Reading and Writing Center

The Reading and Writing Center provides free tutoring on a drop-in basis. Tutors assist students in deciphering writing tasks, organizing reading/writing assignments, and developing content and critical thinking. While the tutors do not provide copy editing services, the tutors do assist students in identifying and correcting specific grammatical errors. In addition, the center provides a Workshop Series presented by a faculty tutor. This series provides focused instruction on particular skills and reading/writing tasks, from fragment identification to scholarship essays.

### Learn How to Be a Successful Reader

Our Reading and Writing tutors will work with students to help them become better readers. Students will learn reading strategies that will not only help in current classes, but throughout all academic endeavors and beyond. Simply drop in. There is no need to schedule an appointment. All RSC tutors are available to help students on a walk-in basis.

### What to Bring

For help with a specific class, bring a textbook or novel, supporting articles/notes, and course syllabus. Also, don't forget student ID.

### Supplemental Instruction

Supplemental Instruction (SI) is a series of weekly review sessions for students enrolled in selected courses. At colleges and universities throughout the country, the SI method has been proven to help increase student understanding of course material and raise grades.

Attendance at SI sessions is voluntary. Students have an opportunity to compare notes, discuss important concepts, study for tests, and develop strategies for studying and learning.

An SI Coach facilitates the SI sessions. The Coach is an exemplary student who has previously taken the course, with a grade of A or B.

### What can you expect from your SI Coach?

1. Attends class along with the students
2. Is trained in the most effective learning and study strategies
3. Operates as a model student and relays tips on the most effective study skills
4. Integrates "how to learn" with "what to learn" in SI classes
5. Provides leadership structure to the study session
6. Is a facilitator for the grade-raising collaborative learning strategies
7. Models critical thinking and problem-solving techniques
8. Empowers students to become independent learners

### SSC Computer Lab

#### Student Lab

El Camino College Compton Center has a sophisticated central instructional computer facility, which includes state-of-the-art computers connected to the Compton Center network. The multi-disciplinary lab is designated for registered ECC Compton Center students. This computer lab contains 100 personal computer systems, interconnected via a high-speed, Ethernet network. The lab offers a wide array of software, including the latest packages for word processing, desktop publishing, and other applications.

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## Transfer and Career Center

The Transfer and Career Center offers students a one-stop location to explore transfer options and different careers.

The mission of the Transfer and Career Center is to strengthen the transfer and career function at ECC Compton Center by offering activities that increase student awareness of transfer and careers opportunities so that more students are prepared to transfer to four-year colleges and universities. Students have access to: counseling, workshops, links to career pathways, career preparedness, effective job/college searches, partnerships with colleges and employers, university tours, and transfer agreements. Assistance is also available on the following topics: resume writing, interview skills, how to dress for success, and how to find and land a job.

For more information about the Transfer and Career Center, please call 310-900-1600, ext. 2764 or visit the office in the D-29.

## Veterans Services

The Veterans Office, located in the Counseling Office in the Administration Building, helps students obtain information for the collection of veterans educational benefits and provides information on educational and counseling services. An application for program certification may be obtained in the ECC Compton Center Admissions and Records office. The completed application along with copies of the service separation form (DD-214) should be submitted to the Veterans Office at El Camino College. 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 liaison in the Compton Center Admissions Office. Before El Camino College will certify enrollment to the VA, it is essential for students to make appointments with the ECC Compton Center veterans counselor to have a Veterans Individual Education Plan completed. Only courses listed on the plan will be certified for VA payment. Veterans and eligible dependents will be certified for benefits only after all transcripts of previous work from other institutions are on file. All veterans and eligible dependents must see an academic counselor to select a major and prepare an education plan which includes units completed and courses needed to complete an educational goal. To make an appointment to see the counselor, call 310-900-1600, ext. 2082.

### Status

Enrollment is verified within one of the following classifications:

### Regular College Year

Full-time: 12 or more units  
Three-fourths time: 9 to 11 1/2 units  
Half-time: 6 to 8 1/2 units

### Summer Session

Summer session varies in length and units. Veterans should check with the VA Office.

El Camino College Compton Center considers veterans and eligible dependents the same as all other students in regard to attendance and academic requirements.

If it is necessary to add a course, drop a course or withdraw from classes, the student must inform the Veterans Office and file the necessary form with the Records Office. When notified, the veterans' clerk will send a Change in Student Status Form (VA form 22-1999B) to Veterans' Affairs.

### Repayment of Benefits

A veteran or eligible dependent who receives a grade of "W" in units for which he or she has received VA benefits may be required to repay all money received for those units. A reduction to less than six units may require the student to repay all money received for the semester.

### Advance Payment

Public Law 92-540 provides that an advanced educational assistance allowance may be paid. Contact the veterans' clerk for details.

## Welcome Center

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 and access to computers. It also provides students with quick access to academic schedules, registration forms, and various campus publications such as the catalog, schedule of classes, and ECC Compton Center maps.

All visitors are encouraged to stop by the Welcome Center to pick up a ECC Compton Center map and information about the academic opportunities available for students and members of the community.

For more information on the Welcome Center please call 310-900-1600, ext. 2765, [outreach@compton.edu](mailto:outreach@compton.edu) or visit Room D-27.

## Student Activities/College Life

### Athletics

The El Camino College Compton Center Tartar Athletics Program is a member of the South Coast Conference and the Southern California Football Association, and is governed by the California Community College Athletic Association. Intercollegiate competition is offered in badminton, baseball, basketball, cross-country, football, track & field, soccer, softball, and volleyball. For more information on our sports programs, please call 310-900-1600, ext. 2940 or visit Building W.

### Student Life

The Student Life Office is the focal point for campus activities/events, and the associated student government. Located in building R-61, the office is open Monday through Thursday, 8:00 a.m. to 6:00 p.m.; and Friday 8:00 a.m. to noon. For more information on the Student Life Office, please call 310-900-1600, ext. 2802.

Services provided by the Student Life 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. Trust Funds Disbursements
7. Student Activities

### Student Government

El Camino College Compton Center students have ample opportunity for self-government, self-direction, and participation in the governance of the Center. 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 El Camino College 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 Clubs and Organizations

Student clubs and organizations offer an extensive program of activities and provide opportunities for active involvement in campus and community life. Student groups offer experiences in the democratic process, the skills and responsibilities of citizenship, and participation in the governance of the 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 advisers and consultants. All student groups are governed by their constitutions, the Interclub Council constitution, and general guidelines. Copies of constitutions and guidelines are available in the Student Life Office.

All student organizations are open to qualified students, regardless of race, religion, or national origin.

For an updated list of Student Clubs and Organizations, please visit the Student Life Office.

Additional groups can be organized by petitioning Student Life and the Associated Student Body for authorization to become new clubs on campus.



## Students' Rights and Responsibilities

### 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. Administrative Procedures 5530 Student Rights and Grievances provide detail regarding student due processes. Information is available on the College website: [www.elcamino.edu/administration/board/policies.asp](http://www.elcamino.edu/administration/board/policies.asp).

### 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, Administrative Procedure 5500, and Administrative Procedure 5520.
2. Police citations (e.g., "tickets"). Complaints about citations must be directed to the District's Campus Police Department.
3. Course grades to the extent permitted by Education Code Section 76224(a). Grade appeals 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 Student 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 during which the College is in session and regular classes are held, excluding public holidays and weekends.
6. Student Grievance Officer: Appointed by the Superintendent/President or designated representative to assist students in seeking resolution.

#### 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 Body, Classified Employees and the Academic Senate, who shall each submit names to the Superintendent/President or designee for inclusion on the panel. A Grievance Hearing Committee shall be constituted in accordance with the following:

It shall include one student, one faculty member, one member of the classified service and one College administrator selected from the panel described above.

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.

The Grievance Officer shall sit with the Grievance Hearing Committee but shall not serve as a member nor vote. The Grievance Officer shall coordinate all scheduling of hearings, shall serve to assist all parties and the Grievance Hearing Committee to facilitate a full, fair and efficient resolution of the grievance, and shall avoid an adversary role.

#### **Informal Resolution:**

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.

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 Body President or designee in attempting to resolve a grievance informally.

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.

At no time shall any of the persons directly or indirectly involved in the case use the fact of such informal discussion, the fact that a grievance has been filed, or the character of the informal discussion for the purpose of for strengthening the case for or against persons directly involved in the dispute or for any purpose other than the settlement of the grievance.

Any student who believes he/she has a grievance shall file a Statement of Grievance with the Grievance Officer within ten (10) business days of the

incident on which the grievance is based, or ten (10) business days after the student learns of the basis for the grievance, whichever is later. The Statement of Grievance must be filed whether or not the student has already initiated efforts at informal resolution, if the student wishes the grievance to become official. Within ten (10) business days following the receipt of the Statement of Grievance Form, the Grievance Officer shall advise the student of his or her rights and responsibilities under these procedures, and assist the student, if necessary, in the final preparation of the Statement of Grievance Form. If at the end of ten (10) business days following the student's first meeting with the Grievance Officer there is no informal resolution of the complaint, which is satisfactory to the student, the student shall have the right to request a grievance hearing.

This concludes the Informal Resolution Process.

#### **Formal Resolution (Request for a Grievance Hearing)**

Any request for a grievance hearing shall be filed on a Request for a Student Grievance Hearing Form within ten (10) business days after filing the Statement of Grievance as described above.

Within ten (10) business days following receipt of the request for a grievance hearing, the Superintendent/President or designee shall appoint a Grievance Hearing Committee, as described above. The Grievance Hearing Committee shall meet in private and, without the parties present, select a chair and determine based on the Statement of the Grievance.

The determination of whether the Statement of Grievance presents sufficient grounds for a hearing shall be based on the following:

1. The statement contains facts which, if true, would constitute a grievance under these procedures.
2. The grievant is a student as defined in these procedures, which include applicants and former students.
3. The grievant is personally and directly affected by the alleged grievance.
4. The grievance was filed in a timely manner.
5. The grievance is not clearly frivolous, clearly without foundation, or clearly filed for purposes of harassment.

If the grievance does not meet each of the above requirements, the Grievance Officer shall notify the student in writing of the rejection of the Request for a Grievance Hearing, together with the specific reason(s) for the rejection and the procedures for appeal. This notice will be provided within ten (10) business days of the date the decision is made by the Grievance Hearing Officer.

If the Request for Grievance Hearing satisfies each of the requirements, the College Grievance Officer shall schedule a grievance hearing. The hearing will begin within ten (10) business days following the decision to grant a Grievance Hearing. All parties to

the grievance shall be given not less than ten (10) business days' notice of the date, time and place of the hearing.

### **Hearing Procedure:**

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.

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.

Each party to the grievance may call witnesses and introduce oral and written testimony relevant to the issues of the matter.

Formal rules of evidence shall not apply. Any relevant evidence shall be admitted.

Unless the Grievance Hearing Committee determines to proceed otherwise, each party to the grievance shall be permitted to make an opening statement. Thereafter, the grievant or grievants shall make the first presentation, followed by the respondent or respondents. The grievant(s) and respondent(s) may present rebuttal evidence after the respondent(s)' evidence is presented. The burden shall be on the grievant or grievants to prove by substantial evidence that the facts alleged are true and that a grievance has been established as specified above.

Each party to the grievance may represent himself/herself, and may have the right to be represented by a person of his/her choice, except that a party shall not be represented by an attorney unless, in the judgment of the Grievance 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 or designee. Any legal adviser 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.

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.

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.

The hearing shall be recorded by the Grievance Officer by either audio recording, and shall be the only recording made. No witness who refuses to be recorded may be permitted to give testimony. The

Grievance Hearing Committee Chair at the beginning of the hearing shall ask each person present to identify himself 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.

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.

Within five (5) business days following the close of the hearing, the Grievance Hearing Committee shall prepare and send to the Superintendent/President or designee a written decision. The decision shall include specific factual findings regarding the grievance, and shall include specific conclusions regarding whether a grievance has been established as defined above. The decision shall also include a specific recommendation regarding the relief to be afforded the grievant, if any. The decision shall be based only on the record of the hearing, and not on matters outside of that record. The record consists of the original grievance, any written response, and the oral and written evidence produced at the hearing.

### **Superintendent/President or Designee Decision:**

Within five (5) business days following receipt of the Grievance Hearing Committee's decision and recommendations, the Superintendent/President or designee shall send to all parties his/her written decision, together with the Hearing Committee's decision and recommendations. The Superintendent/President or designee may accept or reject the findings, decisions and recommendations of the Grievance Hearing Committee. The factual findings of the Hearing Committee shall be accorded great weight. If the Superintendent/President or designee does not accept the decision or a finding or recommendation of the Grievance Hearing Committee, the Superintendent/President or designee shall review the record of the hearing, and shall prepare a new written decision which contains specific factual findings and conclusions. The decision of the Superintendent/President or designee shall be final, subject only to appeal as provided below.

### **Appeal:**

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 Superintendent/President or designee within five (5) business days of that decision. The Superintendent/President or designee shall review the Statement of Grievance and Request for a Student Grievance Hearing in accordance with the requirements for a grievance provided in these procedures, but shall not consider

any other matters. The Superintendent/President or designee's decision whether or not to grant a grievance hearing shall be final and not subject to further appeal.

#### Time Limits:

Any times specified in these procedures may be shortened or lengthened if there is mutual concurrence by all parties.

### Student Complaint Procedure for Issues Not Resolved at the Campus Level

Most complaints, grievances, or disciplinary matters should be resolved at the campus level. This is the quickest and most successful way of resolving issues involving a California Community College (CCC). Students are encouraged to work through the campus complaint process first, before escalating issues to any of the following resources. Issues that are not resolved at the campus level may be presented:

1. To the Accrediting Commission for Community and Junior Colleges (ACCJC) at [www.accjc.org/complaint-process](http://www.accjc.org/complaint-process) if the complaint is associated with the institution's compliance with academic program quality and accrediting standards. The ACCJC can also be contacted by mail (The Accrediting Commission for Community and Junior Colleges Western Association of Schools and Colleges, 10 Commercial Boulevard, Suite 204, Novato, CA 94949), or by phone (415-506-0234), fax (415-506-0238), or email ([accjc@accjc.org](mailto:accjc@accjc.org)). ACCJC is the agency that accredits the academic programs of the California Community Colleges.
2. To the CCC Chancellor's Office Complaints Form at <http://californiacommunitycolleges.cccco.edu/ComplaintsForm.aspx> if your complaint does not concern Compton Center's compliance with academic program quality and accrediting standards.
3. To the CCC Chancellor's Office Legal Affairs website at <http://extranet.cccco.edu/Divisions.aspx> if your complaint involves unlawful discrimination.
4. To the Board of Registered Nurses (BRN) at [www.rn.ca.gov/enforcement/complaint.shtml](http://www.rn.ca.gov/enforcement/complaint.shtml) if the complaint involves the Nursing program and alleges that a licensee of the Board has engaged in illegal activities which are related to his/her professional responsibilities. The BRN can also be contacted by mail (Board of Registered Nursing, Attn: Complaint Intake, PO Box 944210, Sacramento, CA 94244-2100), or by phone, (916-322-3350), fax (916-574-7693), or email ([Enforcement.BRN@dca.ca.gov](mailto:Enforcement.BRN@dca.ca.gov)).
5. To the Joint Review Committee on Education in Radiologic Technology (JRCERT) at [www.jrcert.org/](http://www.jrcert.org/) if the complaint involves the Radiologic Technology program and alleges non-compliance with JRCERT accreditation standards. JRCERT can also be contacted by mail (Chief Executive Officer, Joint Review Committee on Education in Radiologic Technology, 20 North Wacker Drive, Suite 2850, Chicago, IL 60606-3182), or by phone (312-704-5300), fax (312-704-5304), or email ([mail@jrcert.org](mailto:mail@jrcert.org)).
6. To the Commission on Accreditation for Respiratory Care (COARC) at [www.coarc.com/](http://www.coarc.com/) if the complaint involves the Respiratory Care program and alleges non-compliance with COARC accreditation standards. COARC can also be contacted by mail (Commission on Accreditation for Respiratory Care, 1248 Harwood Road, Bedford, TX 76021-4244), or by phone (817-283-2835), fax (817-354-8519), or email ([tom@coarc.com](mailto:tom@coarc.com)).
7. To the Office of the State Fire Marshal at <http://osfm.fire.ca.gov/> if the complaint involves the Fire and Emergency Technology program and alleges non-compliance with accredited academies standards. The Assistant State Fire Marshal can be contacted by mail (Office of the State Fire Marshal, Assistant Fire Marshal, 1131 S Street, Sacramento, CA), or by phone (916-445-8195). The Office of the State Fire Marshal Accredited Academies Coordinator can be contacted by phone (916-445-4518).



## Policies and Procedures Standards of Student Conduct

### Board Policy 5500

The Superintendent/President shall establish procedures for disciplining students in accordance with the requirements for due process of the federal and state laws and regulations.

The procedures shall clearly define the conduct that is subject to discipline, and shall identify potential disciplinary actions including, but not limited to, the removal, suspension, or expulsion of a student.

The Board shall consider any recommendation from the Superintendent/President for expulsion. The Board shall consider an expulsion recommendation in closed session unless the student requests that the matter be considered in a public meeting. Final action by the Board on the expulsion shall be taken at a public meeting.

El Camino College is dedicated to maintaining an optimal learning environment and insists upon academic honesty and adherence to standards of student conduct.

To uphold the academic integrity, all members of the academic community shall assume responsibility for providing an educational environment of the highest standard characterized by academic honesty. It is the responsibility of all members of the academic community to encourage learning, promote honesty, and act with fairness.

Student conduct at El Camino College must conform to federal and state laws and District policies and procedures. El Camino College personnel are dedicated to maintaining a positive learning environment. Optimal standards of student conduct are essential to the maintenance of a quality college environment.

El Camino College will develop and maintain Standards of Student Conduct. The procedures shall be made widely available to students through the College catalog, and other means including electronic communications.

### Administrative Procedure 5500

Student conduct at El Camino College must conform to federal and state laws and District policies and procedures. Standards will apply to all students on District-owned facilities or controlled property or at District-sponsored or supervised functions or electronic media. Violation of such laws, policies, and procedures or behavior adversely affecting suitability as a student, will lead to student disciplinary action. Student disciplinary actions as noted in Board Policy 5500, Administrative Procedure 5500, and Administrative Procedure 5520 may be taken against any person who engages in behavior defined as misconduct.

Students alleged to have violated the Sexual Misconduct Policy with regards to sexual assault, sexual harassment, rape, domestic violence, dating violence, stalking, and retaliation, will be referred to the Title IX Officer. The Title IX Officer will work in coordination with the Director of Student Development or designee to address any violations to the Standards of Student Conduct that are in addition to the allegations of sexual misconduct.

Students who engage in any of the following conduct are subject to the procedures outlined in Administrative Procedure 5520.

### Definitions:

The following misconduct shall constitute good cause for discipline including, but not limited to, the removal, suspension, or expulsion of a student.

#### I. DISHONESTY

1. Cheating, plagiarism (including plagiarism in a student publication), or engaging in other academic dishonesty as defined in the College catalog.
2. Representing the words, ideas, or work of another as one's own in any academic exercise including the use of commercial term paper companies or online sources for essays, term papers, or research papers, whether free or paid.
3. Copying from another student or former student or allowing another student to copy from one's work.
4. Allowing another individual to assume one's identity or assuming the identity of another individual.
5. Unauthorized collaboration-intentionally sharing or working together on an academic exercise when such actions are not approved by the course instructor.
6. Changing answers on a previously scored test, assignment, or experiment with the intent to defraud.
  - a. Inventing data for the purpose of completing an assignment, a laboratory experiment, or case study analysis with the intent to defraud.
  - b. Obtaining or copying exams, test questions, or other course materials when prohibited by the instructor.
  - c. 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.
  - d. Using aids such as notes, calculators, or electronic devices unless specifically authorized by the instructor or District personnel.
  - e. Handing in the same paper or other assignment in more than one class when prohibited by the instructor.
  - f. Any other action which is not an honest reflection of a student's own academic work.
7. Dishonesty, forgery, alteration, or misuse of District documents, records or identification, or knowingly furnishing false information to the District.

8. Unauthorized preparation, giving, selling, transfer, distribution, or publication, for any commercial purpose, of any contemporaneous recording of an academic presentation in a classroom or equivalent site of instruction including, but not limited to, handwritten or typed class notes, still photos, audio, or video recording, except as permitted by any District policy or administrative procedure.

#### II. DISRUPTIVE BEHAVIOR, INAPPROPRIATE CONDUCT, AND EXPRESSION

1. Disruptive behavior, willful disobedience, profanity or vulgarity, or the open defiance of the authority of, or abuse of, District personnel or another person.
2. Causing, attempting to cause, threatening, or acts of aggression including verbal or physical actions that are intended to create fear, apprehension, or bodily harm to another person.
3. Lewd, indecent, or obscene conduct or expression on District-owned facilities or controlled property or at District-sponsored or supervised functions, including public urination or defecation, public sexual acts, taking intimate pictures of another person without consent, disrobing in public, possession and distribution of any obscene material, or viewing pornographic material.
4. Engaging in expression which is obscene, libelous or slanderous, or which so incites others as to create a clear and present danger of the commission of unlawful acts on District-owned facilities or controlled property or at District-sponsored or supervised functions, or the violation of lawful District regulations, or the substantial disruption of the orderly operation of the District.
5. Obstruction or disruption of teaching, research, administration, disciplinary proceedings, or other authorized college activities including, but not limited to, its community service functions or to authorized activities held off-campus.
6. Obstruction or disruption includes, but is not limited to, the use of skateboards, bicycles, radios, and roller skates.
7. Failure to comply with the directions of a member of the District certificated personnel, college management or supervisory personnel, college staff member, or campus police acting within the scope of his or her duties.
8. Conducting, organizing or participating in any activity involving gambling except as permitted by federal and state law.

#### III. DRUGS, ALCOHOL, AND SMOKING

1. Unlawful possession, use, sale, offer to sell, or furnishing, or being under the influence of, any controlled substance listed in California Health and Safety Code Sections 11053 et seq., an alcoholic beverage, or an intoxicant of any kind; or unlawful possession of, or offering, arranging or negotiating the sale of any drug paraphernalia, as defined in California Health and Safety Code Section 11014.5 on District-owned facilities or controlled property or at District-sponsored or supervised functions.

2. Willful or persistent smoking (including tobacco and vapor cigarettes) in any area where smoking has been prohibited by law or by regulation of the District.

#### IV. THEFT, ROBBERY, AND DAMAGE

1. Committing or attempting to commit robbery or extortion.
2. Causing or attempting to cause damage to District property or to private property on District-owned facilities or controlled property or at District-sponsored or supervised functions.
3. Stealing or attempting to steal District property or private property or knowingly receiving stolen District property or private property on District-owned facilities or controlled property or at District-sponsored or supervised functions.
4. Willful misconduct which results in cutting, defacing, or other injury to any real or personal property owned by the District or personal property of other individuals District-owned facilities or controlled property or at District-sponsored or supervised functions.

#### V. SEXUAL MISCONDUCT

1. Committing sexual misconduct including, but not limited to, sexual harassment, domestic violence, dating violence, stalking, sexual assault (non-consensual sexual contact and/or intercourse), sexual exploitation, intimidation, retaliation, and rape as defined by law or by District policies and procedures.
2. Lewd, indecent, or obscene conduct on District-owned or controlled property or at District-sponsored or supervised functions.
3. Other misconduct offenses in violation of the El Camino College Sexual Misconduct Policy.

#### VI. HARASSMENT, THREATENING, AND VIOLENT BEHAVIOR

1. Causing, attempting to cause, or threatening to cause physical injury to another person on District-owned facilities or controlled property or at District-sponsored or supervised functions.
2. Engaging in intimidating conduct or bullying against another person through words or actions, including direct physical contact, verbal assaults, such as teasing or name-calling, social isolation or manipulation, and cyberbullying.
3. Willful misconduct which results in injury or death to a student or to college personnel or which results in cutting, defacing, or other injury to any real or personal property on District-owned facilities or controlled property or at District-sponsored or supervised functions.
4. Disruptive behavior, willful disobedience, habitual profanity or vulgarity, or the open and persistent defiance of the authority of, or persistent abuse of, District personnel or another person.

5. Willful misconduct which results in injury or death to another person or which results in cutting, defacing, or other injury to any real or personal property owned by the District or controlled property or at District-sponsored or supervised functions.
6. Other misconduct offenses relative to disability, gender, gender identity, gender expression, nationality, race or ethnicity, religion, sexual orientation, or any other status protected by law including, but not limited to, bullying, discrimination, threatening, or causing abuse (including physical and/or verbal).
7. Violence between those in intimate/dating relationships to each other, and stalking, as defined by law or by District policies and procedures.

#### VII. WEAPONS

Possession, sale or otherwise furnishing any firearm, knife, explosive, or other dangerous object including, but not limited to, any facsimile firearm, knife, or explosive on District-owned facilities or controlled property or at District-sponsored or supervised functions, unless, in the case of possession of any object of this type, the student has obtained written permission to possess the item from a District employee, which is concurred in by the Superintendent/President or designee.

#### VIII. MISUSE OF FACILITIES

Unauthorized entry upon or use of District-owned facilities or controlled property or at District-sponsored or supervised functions.

#### IX. MISCELLANEOUS

1. Introduction of animals on District-owned facilities or controlled property or at District-sponsored or supervised functions are not permitted with the exception of service animals that provide assistance as permitted by federal and state law.
2. Persistent, serious misconduct where other means of correction have failed to bring about proper conduct.
3. The commission of any act constituting a crime under federal or state law on District-owned facilities or controlled property or at District-sponsored or supervised functions.



## Student Discipline and Due Process Procedure

### Administrative Procedure 5520

Students may review Administrative Procedure 5520 on the El Camino College website:  
[www.elcamino.edu/administration/board/policies.asp](http://www.elcamino.edu/administration/board/policies.asp).

## Access to Records and Release of Information

### Family Educational Rights and Privacy Act of 1974

All education records of students who enroll at El Camino College are kept in accordance with the provisions of the Family Educational Rights and Privacy Act of 1974. A student may request access to his or her education record, which personally identifies the student and may challenge the accuracy of the record or the appropriateness of its retention. Student consent is needed for the release of records covered by the act to outside parties (e.g., prospective employers) except for those agencies entitled to access under the provisions of the act (e.g., campus officials, other schools, federal educational and auditing officials, and requests in connection with the application or receipt of financial aid). These provisions apply to records received and used after Nov. 19, 1974.

Students may request a copy of a record that the student has requested or consented to be released. The full text of the Family Educational Rights and Privacy Act of 1974 is in the United States Code Annotated, Title 20, 1232g, pocket part, in the campus library reference room. Particular questions with respect to a student's prerogative under the Family Educational Right and Privacy Act of 1974 should be directed to the office of the Dean, Student Services.

### Student Information

In accordance with Education Code Section 54626: information may be made available to newspaper, magazine, radio, or television media and prospective employers for the purpose of reporting a student's participation in officially recognized College activities and sports events or the student's receipt of College degrees and awards.

Information may include the student's name, address, telephone listing, date and place of birth, major field of study, class schedule, dates of attendance, weight and height of members of athletic teams, and the most recent previous educational institution attended by the student. The names and addresses of students may be provided to public or private schools or colleges for purposes directly related to the academic or professional goals of the institution.

A student who does not wish any or all of the information to be made available without prior consent must file a petition in the Admissions Office at the time of enrollment or before the beginning of classes, requesting that this information be withheld.

## Notice of Non-Discrimination

The policy of the El Camino Community College District is, in part, to provide an educational and employment environment in which no person shall be unlawfully denied admission, access or benefit to, nor employment in any program or activity that is administered, funded directly by, or that receives any financial assistance from the State Chancellor or Board of Governors of the California Community Colleges on the basis of race, color, national origin, sex (including sexual harassment), gender, disability, and age as required by Title VI, Title IX, Section 504, the Age Discrimination Act.

Employees, students or other persons acting on behalf of the district who engage in unlawful discrimination as defined in this policy or by state or federal law may be subject to discipline up to and including expulsion or termination. Any retaliation against a person for filing a discrimination charge or making a discrimination complaint is prohibited.

The District has identified the Director of Staff and Student Diversity as the designated responsible employee for receiving all complaints of discrimination, harassment and retaliation and the designated coordinator under the ADA/Section 504, Title IX and the Age Discrimination Act. Inquiries regarding compliance with these statutes, and complaints may be directed to the Director of Staff and Student Diversity by calling (310) 660-3593, ext. 3813.



## Unlawful Discrimination Complaints

The college affirms its policy to provide an educational and employment environment in which no person shall be unlawfully denied admission, access or benefit to, nor employment in any program or activity that is administered, funded directly by, or that receives any financial assistance from the State Chancellor or Board of Governors of the California Community Colleges on the basis of race, color, national origin, sex (including sexual harassment), gender, disability, and age as required by Title VI, Title IX, Section 504, the Age Discrimination Act. Students or employees with questions, concerns or complaints of unlawful discrimination may contact and/or file a complaint with these offices.

### Las Quejas por Discriminación Illegal

El Colegio reafirma su política de ofrecer una educación y entorno laboral en el que ninguna persona podrá ser ilegalmente ha negado el ingreso, el acceso o beneficio, ni empleo en cualquier programa o actividad que se administra, financiados directamente por, o que recibe ayuda financiera del Canciller del Estado o la Junta de Gobernadores de California Community Colleges sobre la base de raza, color, origen nacional, sexo (como el acoso sexual), el género, la discapacidad, la edad o según se requiera por el Título VI, Título IX, Sección 504, la Ley de discriminación por edad. Estudiantes o empleados con preguntas, preocupaciones o quejas de discriminación ilegal puede ponerse en contacto con y/o presentar una queja con estas oficinas.

Students and employees may file an official complaint with the appropriate offices or agencies to initiate an El Camino College discrimination investigation:

- ECC Compton Center Equal Employment Officer, Ms. Rachelle Sasser, Dean, Human Resources, C-38 310-900-1600, ext. 2400 (Students/Employees)
- California Community Colleges System Office  
Attention: Legal Affairs Division  
1102 Q Street, Sacramento, CA 95814-6511  
(Students/Employees)
- U.S. Department of Education,  
Office for Civil Rights,  
50 Beale Street, Suite 7200  
San Francisco, CA 94105 (Students)
- California Department of Fair Employment and Housing,  
611 W. Sixth Street, Suite 1500  
Los Angeles, CA 90017 (Employees)
- U.S. Equal Employment Opportunity Commission  
255 E. Temple Street, 4th Floor,  
Los Angeles, CA 90012  
(Employees)



## Sexual and Gender-Based Misconduct

### Including Sexual Assault, Sexual Harassment, and Dating Violence

It is the policy of the El Camino Community College District to provide an education, employment, and business environment free of sexual and gender-based misconduct, including sexual assault, domestic and dating violence, stalking, and sexual harassment such as unwelcome sexual advances, requests for sexual favors, as well as any other unlawful sexual or gender-based verbal or physical conduct or communications as defined and otherwise prohibited by state and federal law. Sexual and gender-based misconduct violates the policy of the District and provisions of the California Fair Employment Act, Education Code and federal rules, regulations and laws prohibiting sexual and gender-based misconduct, including sexual assault, sexual harassment, domestic and dating violence, and stalking. Sexual and gender-based misconduct shall be immediately reported to the District's Title IX Coordinator, or designee, or to any dean, director, or manager for immediate reporting to the Title IX Coordinator. Detailed information, including resources and Title IX procedures, is available in the Office of Staff and Student Diversity, Administration Building, Room 210 and online at [www.elcamino.edu/administration/hr/diversity/misconduct.asp](http://www.elcamino.edu/administration/hr/diversity/misconduct.asp).

## Reporting of Crimes

### Board Policy 3515

The Superintendent/President shall assure that, as required by law, reports are prepared of all occurrences reported to Campus Police and arrests for crimes committed on campus that involve violence, hate violence, theft or destruction of property, illegal drugs, or alcohol intoxication. The Superintendent/President shall further assure that required reports of non-criminal acts of hate violence are prepared. Such reports shall be made available as required by state and federal law.

### 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/](http://www.elcamino.edu/police/). These materials will be distributed annually to all employees and students, and be available upon request to applicants for enrollment or employment.

Student Right to Know regulations require colleges to annually publish completion and transfer rates. This information is available through appropriate publications and mailings, and on the College website: [www.elcamino.edu/administration/ir/docs/eccprofile/ECC\\_College\\_CommunityProfiles.pdf](http://www.elcamino.edu/administration/ir/docs/eccprofile/ECC_College_CommunityProfiles.pdf).

## Academic Regulations

### 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)

#### 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 percent of a class. A student earning a P grade will receive unit credit toward graduation if the course is degree applicable. Unit credit earned in P/NP courses will not be considered when calculating grade point average. Designation of P/NP or option P/NP grading is included in the course description. All grades in credit courses except W and P/NP will be considered in determining the grade point average. While NP and W grades are not used in grade point determination, a student with an excessive number of withdrawals or NPs is subject to probation or dismissal regulations.

#### 2. I-Incomplete

A student may receive a notation of "I" (Incomplete) and a default grade when a student did not complete his or her academic work for unforeseeable, emergency, and justifiable reasons. The Incomplete grade to be assigned by the instructor and designated on the student's transcript will be IB, IC, ID, or IF. Collectively, these grades will be referred to as an "I" grade. If the student does not complete the required work by the end of the sixth week, the "I" will automatically be removed and the default grade will be assigned. Any extension of the time for completion of the required work must be approved by the division dean.

#### 3. IP-In Progress

The "IP" symbol shall be used only in those courses, which extend beyond the normal end of an academic term. It indicates that work is "in progress," but that assignment of an evaluative symbol (grade) must await its completion. The "IP" symbol shall remain on the student's permanent record in order to satisfy enrollment documentation. The appropriate evaluative symbol (grade) and unit credit shall be assigned and appear on the student's permanent record for the term in which the course is completed. The "IP" shall not be used in calculating grade point averages. If a student enrolled in an "open-entry, open-exit" course is assigned an "IP" at the end of an attendance period and does not re-enroll in that course during the subsequent attendance period, the appropriate faculty will assign an evaluative symbol (grade-A through F, P or NP) to be recorded on the student's permanent record for the course.

#### 4. W-Withdrawal

It is the student's responsibility to process a withdrawal. A student may also be dropped by the instructor if the student has excessive absences. Withdrawal from classes is authorized through the 12th week of instruction in a 16-week class, or 75 percent of a class, whichever is less. If a student remains in class beyond the published withdrawal date, an evaluative symbol (grade-A through F, P or NP) or an "I" (Incomplete) shall be assigned. A student who must withdraw after the published withdrawal date due to extenuating circumstances may petition for assignment of a "W." Extenuating circumstances are verified cases of accidents, illnesses or other circumstances beyond the control of the student.

No notation ("W" or other) shall be made on the academic record of the student who withdraws prior to the close of the fourth week of a 16-week class, or 30 percent of a class, whichever is less. Any withdrawal occurring after the published No Notation date shall be recorded as a "W" on the student's record.

The "W" shall not be used in calculating grade point averages, but excessive "W's" shall be used as factors in probation and dismissal procedures.

#### 5. MW-Military Withdrawal

Military Withdrawal occurs when a student who is a member of an active or reserve United States military service receives orders compelling a withdrawal from courses. Upon verification of such orders, the student may be assigned "MW." Military withdrawals shall not be counted in the limitation on excessive withdrawals nor in progress probation and dismissal calculations.

### Grade Change

#### Board Policy 4231

When grades are given for any course of instruction taught in the El Camino Community College District, the grade given to each student shall be the grade determined by the instructor of the course, and the determination of the student's grade by the instructor, in the absence of mistake, fraud, bad faith, or incompetency, shall be final.

A student who alleges that a grade in a course was given as a result of mistake, fraud, bad faith, or incompetency may appeal the grade within 18 months of the last day of the term in which the grade was posted.

Upon determination by the District that a grade in a course was given as a result of fraud, the District may change or remove the fraudulent grade from the student's transcript of record based on the recommendation of a faculty committee. Such action may be initiated upon determination of the fraud without regard to the time limits imposed on other grade appeal actions.

Procedures for changing or removing grades in accordance with this policy have been developed by the President/Superintendent or his designees in collegial consultation with the Academic Senate.

This policy supersedes the section of BP 4220 that deals with grade change procedures.

#### Grade Change Administrative Procedure 4231

Students may review the Administrative Procedure for Board Policy 4231 on the El Camino College website [www.elcamino.edu/administration/board/policies.asp](http://www.elcamino.edu/administration/board/policies.asp).

### Limitation to Remedial Coursework

#### Board Policy 4115

It is the policy of El Camino College that a student shall not receive credit for more than 30 units of remedial (pre-collegiate basic skills) course work at El Camino College. This limitation does not apply to:

1. A student enrolled in an English as a Second Language course
2. A student identified as having a learning disability

A student may be granted a waiver to the 30-unit limit upon petition. Waivers will be granted only if the student shows measurable progress towards the development of skills necessary for success in college-level courses.

Procedures for implementing this policy will be developed by the Superintendent/President in collegial consultation with the Academic Senate.

### Prerequisites and Corequisites

#### Board Policy 4260

The Superintendent/President is authorized to establish prerequisites, corequisites and advisories on recommended preparation for courses in the curriculum. All such prerequisites, corequisites and advisories shall be established in accordance with the standards set out in Title 5. Any prerequisites, corequisites or advisories shall be necessary and appropriate for achieving the purpose for which they are established. The procedures shall include a process by which a prerequisite or corequisite may be challenged by a student on grounds permitted by law. Prerequisites, corequisites and advisories shall be identified in District publications available to students.

Procedures for implementing the policy will be developed in collegial consultation with the Academic Senate, as defined in CCR § 53200.

#### Administrative Procedure 4260

Students may review the Administrative Procedure for Board Policy 4260 on the El Camino College website [www.elcamino.edu/administration/board/policies.asp](http://www.elcamino.edu/administration/board/policies.asp).

## Probation, Dismissal and Readmission

### Board Policy 4250

El Camino College has two types of probation: Academic Probation and Progress Probation. The purpose of probation is to encourage a student having academic difficulties to seek appropriate guidance and support in formulating and achieving goals.

#### 1. Placement on Academic Probation

A student who has attempted at least 12 semester units, as shown by the academic record, will be placed on Academic Probation when the grade point average for total units attempted at El Camino College is less than 2.0.

#### 2. Removal from Academic Probation

A student will be removed from Academic Probation when the cumulative grade point average is 2.0 or higher in total units attempted at El Camino College.

#### 3. Placement on Progress Probation

A student who has enrolled in 12 or more semester units as shown by the official academic record will be placed on Progress Probation if entries of "W," "I," "NC" and/or "NP" account for 50 percent or more of the total units attempted. Courses dropped prior to the "No Notation" deadline are not considered "units attempted" and do not receive entries as "W" "I," or "NC/NP"

#### 4. Removal from Progress Probation

A student will be removed from Progress Probation when the percentage of entries of "W," "I," "NC" and/or "NP" drops below 50 percent of the total units attempted.

#### 5. Dismissal Because of Academic Probation

A student on Academic Probation will be dismissed if the student earned a cumulative grade point average of less than 2.0 in all 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. summer) will not be considered a semester. A semester in which the student does not take any courses will not be counted as a semester.

#### 6. Dismissal Because of Progress Probation

A student on Progress Probation will be dismissed if the percentage of units in which the student has been enrolled for which entries of "W," "I," "NC" and/or "NP" remains at or above 50 percent for three consecutive semesters. 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 percent.

## Probation, Disqualification and Dismissal

### Administrative Procedure 4250

Students may review the Administrative Procedure for Board Policy 4250 on the El Camino College website [www.elcamino.edu/administration/board/policies.asp](http://www.elcamino.edu/administration/board/policies.asp).

## Academic Renewal Policy and Procedures

### Board Policy 4240

The Superintendent/President shall, in consultation with the appropriate groups, develop procedures that provide for academic renewal. It is the policy of El Camino College to allow previously recorded substandard academic work to be disregarded if it is not reflective of a student's more recently demonstrated ability and if repetition is not appropriate to the current objectives of the student.

Procedures for implementing the policy will be developed in collegial consultation with the Academic Senate.

### Academic Renewal Administrative Procedure 4240

Students may review the Administrative Procedure for Board Policy 4240 on the El Camino College website [www.elcamino.edu/administration/board/policies.asp](http://www.elcamino.edu/administration/board/policies.asp).

## Academic Freedom

### Board Policy 4030

The El Camino Community College District recognizes that institutions of higher education are conducted for the common good and not to further the interest of either the individual faculty member or the institution as a whole. The common good depends upon the free search for truth and its free expression. Academic freedom is essential to these purposes and applies to both teaching and research. Academic freedom is fundamental for the protection of the rights of the faculty member in teaching and of the student in learning. It carries with it responsibilities correlative with rights. Accordingly, a faculty member shall have the freedom:

1. To examine or endorse unpopular or controversial ideas either in classroom teaching or in discussions with students as is appropriate to the course content, or in academic research or publication, while recognizing the responsibility to be accurate, objective and respectful of others. Faculty also have the responsibility to grade students solely on the basis of evidence of knowledge of the material pertinent to the class and attainment of appropriate skills, or other generally accepted grading criteria, avoiding any bias generated by a student's political outlook, religious belief or other personal attributes.
2. To select or recommend the selection of course instructional materials that may contain unpopular or controversial ideas, with the correlative responsibility that these materials are pertinent for the course.
3. To speak or write as a citizen, provided that the faculty member recognizes the special professional obligations of an educator to be accurate, objective and respectful of others, and that the faculty member takes care to avoid leaving the impression that he or she is speaking for the College or the district.
4. To select or recommend library books, materials, media and online resources representing a multiplicity of philosophies and points of view, relying on professional expertise to maintain appropriate depth and breadth of the collections.

A faculty member shall not be subject to any adverse action affecting his or her employment with the El Camino Community College District for exercising any of the foregoing choices. Procedures for implementing the policy will be developed in collegial consultation with the Academic Senate.

## Course Repetition

### Board Policy 4225

The Superintendent/President or designee will have the authority to develop and implement policy and procedures with regards to repeatable and non-repeatable courses within the district. Such policies and procedures will be developed in accordance with state, federal and/or district regulations.

Repeatable courses with the designation of "ab, abc, or abcd" may be taken more than once for credit. El Camino College designates as repeatable courses for which repetition is necessary to meet the lower-division major requirements of CSU or UC for completion of a Bachelor's Degree, intercollegiate athletics and related conditioning courses, and intercollegiate academic or vocational competition courses.

Non-repeatable courses may be taken only once for credit. Students may retake a non-repeatable course in which they have received a substandard grade (D, F, NP or NC) or Withdrawal (W) only once before college intervention.

Under special circumstances, students may repeat courses in which a grade of C or better was earned. These special circumstances and other specific exceptions to the above policies are detailed in administrative procedures.

When course repetition occurs, the permanent academic record shall be annotated in such a manner that all work remains legible, insuring a true and complete academic history.

Procedures for implementing the policy will be developed in collegial consultation with the Academic Senate.

### Course Repetition Administrative Procedure 4225

Students may review the Administrative Procedure for Board Policy 4225 on the El Camino College website [www.elcamino.edu/administration/board/policies.asp](http://www.elcamino.edu/administration/board/policies.asp).



## Course Repetition Policy and Active Participatory Course Limitations

Students may repeat credit courses at El Camino College under specific circumstances as outlined in Board Policy 4225 and Administrative Procedure 4225. There are three general circumstances when a course may be repeated:

1. when a course is specifically designed as repeatable;
2. when a student earns a substandard grade (D, F, or NP) or a Withdrawal (W) is assigned, and the student wants to retake the course to earn a passing grade; and
3. when a student meets the criteria for special circumstances.

Repetition occurs when a student who has previously received an evaluative symbol (grade) in a particular credit course re-enrolls in that same course and receives another evaluative symbol. Credit course repetition is regulated by state guidelines as described in Title 5 of the California Code of Regulations, Sections 55040-55046.

### Repeatable Courses

Repeatable courses are those listed in the College Catalog that have lowercase letters in the course number. The lowercase letters indicate the number of times a course may be repeated. Examples of repeatable courses include Physical Education 60abc (Women's Intercollegiate Soccer Team) and Communication Studies 23abcd (Forensics – Team Events). In these examples, students may enroll in Physical Education 60abc three times and Communication Studies 23abcd four times.

El Camino College only designates the following types of courses to be repeatable per Title 5:

1. Courses for which repetition is necessary to meet the lower-division major requirements of CSU or UC for completion of a Bachelor's Degree (Title 5, Section 55041(a)(1)).
2. Intercollegiate athletics and related conditioning courses (Title 5, Section 55041(b)(2)).
3. Intercollegiate academic or vocational competition (Title 5, Section 55041(a)(3)).

### Course Repetition to Alleviate a Substandard Grade

Students may retake a non-repeatable course in which they have one unsuccessful attempt only once without College intervention. An unsuccessful attempt occurs when a student receives a Withdrawal (W) or a substandard grade (D, F, or NP). Students may retake a non-repeatable course in which they have two unsuccessful attempts only after completing College intervention. This intervention involves a student petition, which is reviewed on a case-by-case basis by the appropriate dean and/or the Admissions Office. The petition form can be obtained in the appropriate academic division office. Students are limited to a maximum of three (3) enrollments in a course unless otherwise specified in Title 5, Sections 55040-55046.

A passing or substandard grade received in the retake shall replace the original grade in the calculation of the grade point average, except under circumstances specified in Title 5, Section 55040(b)(6)(8)(9). This will be annotated on the student's academic transcript. The original grade, alleviated by the new grade, must remain on the student's academic transcript. A maximum of two substandard grades will be excluded in computing the student's grade point average (Title 5, Section 55042).

In general, students are not permitted to repeat courses in which they have earned a grade of A, B, C, or P except due to Special Circumstances as described below.

### Special Circumstances

Students may only petition to repeat a course beyond the maximum allowed enrollments under the following conditions:

1. Significant Lapse of Time (Title 5, Section 55040(b)(3), 55043): Students may petition to repeat a class if it is determined that a significant lapse of time (no less than 36 months) has occurred since the last time the student was enrolled in the course. The course must be required by the district as a recency prerequisite or another institution of higher education as to which the student seeks to transfer has established a recency prerequisite, which the student will not be able to satisfy without repeating the course in question.
2. Variable Unit Open-Entry/Open-Exit Courses (Title 5, Section 55040(b)(4), 55044): Enrollments are limited to the number of times necessary for a student to complete one time the entire curriculum of the course as described in the corresponding course outline of record.
3. Extenuating Circumstances (Title 5, Section 55040(b)(5), 55045): Students may petition to repeat a course due to verified cases of accidents, illness, or other circumstances beyond the control of the student. The grade achieved by the student in the previous enrollment can be substandard or passing (A, B, C, D, F, or NP). A student receiving a non-evaluative grading symbol (I, IP, RD, W, or MW) cannot re-enroll in a course as a result of extenuating circumstances.

4. Occupational Work Experience (Title 5, Section 55040(b)(6)): Districts may permit students to enroll multiple times in an occupational work experience course if certain conditions are met as outlined in Title 5, Section 55253.
5. Special Classes for Students with Disabilities (Title 5, Section 55040(b)(7)): Special classes designed for students with disabilities may be subject to extensions of repeatability in certain circumstances. Repetition may be authorized based on a case-by-case determination related to the student's educational limitation pursuant to state and federal non-discrimination laws. The determination must be based on one of the following circumstances as specified in Title 5, Section 56029:
  - a. when continuing success of the student in other general and/or special classes is dependent on additional repetitions of a special class;
  - b. when additional repetitions of a specific class are essential to completing a student's preparation for enrollment into other regular or special classes; and
  - c. when the student has a student educational contract which involves a goal other than completion of the special class in question and repetition of the course will further achievement of that goal.
6. Legally Mandated Courses (Title 5, Section 55040(b)(8)): Students are allowed to repeat a course when the repetition is necessary to enable students to meet a legally mandated training requirement as a condition of volunteer or paid employment. Students can repeat such courses any number of times, even if they received a grade of C or better; however, the grade and credit earned by the student each time will be included in calculations of the student's grade point average.
7. Significant Change in Industry or Licensure Standards (Title 5, Section 55040(b)(9)): Students may petition the district to repeat a course as a result of a significant change in industry or licensure standards such that repetition of the course is necessary for employment or licensure. Students can repeat such courses any number of times, even if they received a grade of C or better; however, the grade and credit earned by the student each time will be included in calculations of the student's grade point average.

### Active Participatory Course Limitations – Course Families

Prior to fall 2013, students were able to repeat active participatory courses in the areas of Art, Dance, Theatre, Music, and Physical Education (PE). However, as of fall 2013, all active participatory courses are non-repeatable and can only be taken one time subject to the limitations set forth in Title 5, Section 55040(c).

While students will not, in most cases, be allowed to repeat active participatory courses, they will still be allowed to enroll in a series of active participatory courses that are related in content (commonly referred to as a family of courses) a maximum of four times within the district. This limitation does not contain a grandfather clause and includes courses taken both before and after fall 2013. Therefore, if a student has reached the maximum four enrollments within a family, regardless of grade or W, then he/she cannot enroll in any course within the family again within the El Camino Community College District.

A family of courses may include more than four courses, but students are limited to a maximum of four courses in any family. All grades, including Ws, will count toward the four-course enrollment limitation and for computing the grade point average (GPA). Students can repeat Art, Dance, Drama, Music, and PE courses that are included in Families of Courses in which a D, F, or NP grade was earned or a W was assigned; however, all enrollments count toward the four-enrollment maximum for each family of courses.



PHYSICAL EDUCATION PROGRAM COURSE FAMILIES			
<b>Cardiorespiratory Training Family</b>	PE 2 – Walking for Fitness PE 245 – Water Aerobics PE 254 – Aerobic Fitness PE 404 – Adapted Cardiovascular Fitness	<b>Racquet Sports Family</b>	PE 204 – Badminton PE 251 - Tennis
<b>Combatives Family</b>	PE 18 – Boxing PE 220 – Naginata: A Japanese Martial Art PE 221 – Combative Arts and Self Defense	<b>Resistance Training Family</b>	PE 54 – Weight Training PE 259 – Circuit Training PE 401 – Adapted Strength Training
<b>Cross Training Family</b>	PE 3 – Boot Camp Fitness Training PE 10 – Body Conditioning and Physical Fitness PE 400 – Adapted Fitness	<b>Swimming Family</b>	PE 240 – Beginning Swimming PE 241 – Intermediate/Advanced Swimming PE 249 – Swimming for Fitness PE 402 – Adapted Swimming and Hydroexercise
<b>Individual Sport Family</b>	PE 208 – Bowling PE 224 – Golf PE 244 – Springboard Diving PE 407 – Adapted Bowling	<b>Team Sports Family</b>	PE 4 – Basketball PE 7 – Baseball PE 74 – Soccer PE 233 – Pep Squad and Cheer PE 234ab – Pep Squad and Cheer Competition PE 253 – Volleyball PE 255 – Beach Volleyball
<b>Lifeguard Family</b>	PE 247 – Swimming, Lifeguard Training PE 248 – Swimming, Water Safety Instructor	<b>Yoga Family</b>	PE 257 – Yoga for Health and Fitness PE 258 – Power Vinyasa Yoga PE 409 – Adapted Yoga
<b>Outdoor Fitness Adventure Family</b>	PE 47 – Introduction to Indoor Rock Climbing PE 250 – Techniques of Surfboard Riding		
ART PROGRAM COURSE FAMILIES			
<b>Ceramics Family</b>	Art 161 – Beginning Ceramics Art 262 – Intermediate Ceramics Art 263 – Advanced Ceramics	<b>Painting Family</b>	Art 222 – Fundamentals of Painting I Art 223A – Fundamentals of Painting II Art 223B – Fundamentals of Painting III
<b>Drawing Family</b>	Art 110 – Drawing Fundamentals I Art 210 – Drawing Fundamentals II	<b>Printmaking Family</b>	Art 187 – Printmaking I: Etching and Relief Art 288 – Printmaking II: Etching and Relief Art 289 – Lithography Art 290 – Screen Printing
<b>Figure Painting Family</b>	Art 224 – Life Painting I Art 225 – Life Painting II	<b>Sculpture Family</b>	Art 181 – Beginning Sculpture Art 282 – Life Sculpture
<b>Jewelry Family</b>	Art 173 – Introduction to Jewelry and Metalsmithing Art 274 – Jewelry Fabrication Art 275 – Jewelry Casting	<b>Two-Dimensional Design Family</b>	Art 130 – Two-Dimensional Design I Art 230 – Two-Dimensional Design II
<b>Life Drawing Family</b>	Art 217 – Life Drawing I Art 218 – Life Drawing II	<b>Watercolor Family</b>	Art 219 – Watercolor Painting I Art 220 – Watercolor Painting II

DANCE PROGRAM COURSE FAMILIES			
<b>Ballet Family</b>	Dance 120A – Beginning Ballet A Dance 120B – Beginning Ballet B Dance 220A – Intermediate Ballet A Dance 220B – Intermediate Ballet B Dance 221 – Ballet Variations	<b>Social Dance Family</b>	Dance 167 – Social and Ballroom Dance Dance 168 – Latin Social Dance Dance 268 – Intermediate Latin Social Dance
<b>Choreography Family</b>	Dance 171A – Beginning Choreography A Dance 171B – Beginning Choreography B Dance 271A – Intermediate Choreography A Dance 271B – Intermediate Choreography B	<b>Tap Dance Family</b>	Dance 161 – Tap Dance I – Beginning Dance 261 – Tap Dance II – Intermediate
<b>Jazz Dance Family</b>	Dance 140 – Jazz Dance I Dance 240 – Jazz Dance II	<b>World Dance Family</b>	Dance 164 – World Dance Dance 165 – African Dance Dance 265 – Intermediate African Dance
<b>Modern Dance Family</b>	Dance 130A – Beginning Modern Dance A Dance 130B – Beginning Modern Dance B Dance 230A – Intermediate Modern Dance A Dance 230B – Intermediate Modern Dance B		
MUSIC PROGRAM COURSE FAMILIES			
<b>Audition Preparation Family</b>	Music 232 – Advanced Piano Music 290 – Intermediate Applied Music/Individual Lessons	<b>Large Ensemble Family</b>	Music 265abcd – Symphonic Band Music 268abcd – Symphony Orchestra
<b>Beginning Instrument Family</b>	Music 143 – Beginning Woodwind Instruments Music 144 – Beginning Brass Instruments Music 145 – Beginning Percussion Instruments Music 146 – Beginning String Instruments	<b>Piano Family</b>	Music 131A – Beginning Piano I Music 131B – Beginning Piano II Music 231A – Intermediate Piano I Music 231B – Intermediate Piano II
<b>Choral Ensemble Family</b>	Music 151abcd – Mixed Chorus Music 152abcd – Concert Choir Music 253abcd – Chorale Music 257abcd – Women’s Chorus	<b>Small Ensembles Family</b>	Music 260abcd – Woodwind Ensembles Music 261abcd – Brass Ensembles Music 262abcd – Percussion Ensembles Music 263abcd – Clarinet Choir
<b>Guitar Family</b>	Music 147A – Beginning Guitar Music 147B – Beginning Guitar II Music 247 – Intermediate Guitar	<b>Voice Family</b>	Music 120 – Voice Class I Music 220 – Voice Class II Music 221 – Introduction to Lyric Diction for Singers
<b>Jazz Large Ensemble Family</b>	Music 266abcd – Studio Jazz Band Music 267abcd – Concert Jazz Band		
THEATRE PROGRAM COURSE FAMILIES			
<b>Acting Family</b>	Theatre 113 – Introduction to Acting Theatre 114 – Fundamentals of Acting Theatre 214A – Intermediate Acting Theatre 217 – Acting Shakespeare		

## Field Trips and Excursions

### Board Policy 4300

The Superintendent/President shall establish procedures that regulate the use of district funds for student travel and attendance at conferences and other activities that are performed as a class assignment or co-curricular activity.

The Superintendent/President, under authorization from the Board of Trustees, may authorize field trips and excursions for students in connection with courses of instruction or college-related social, educational, cultural, athletic or musical activities to and from places in California, or any other state, the District of Columbia, or a foreign country. The Superintendent/President may delegate the authority to the appropriate Vice President.

The district may pay for expenses of students participating in a field trip or excursion with auxiliary, grant or categorical program funds if the funds are used consistently with the funding source. The expenses of instructors, chaperones, and other personnel traveling with students may also be paid from district funds. No student shall be prevented from making a field trip or excursion, which is integral to the completion of the course because of lack of sufficient funds.

Students and staff shall at all times adhere to the standards of conduct applicable to conduct on campus.

### Additional Information

Throughout the school year, the district may sponsor voluntary field trips and excursions in which students may want to participate. Be advised, as stated in Title 5, Section 55220, if a student participates in a voluntary field trip or excursion, the student has deemed to hold harmless the district, its officers, agents and employees from all liability or claims, which may arise out of or in connection with the student's participation in this activity.

## Instructional Materials Fees

Students may be required to provide instructional materials required for a credit or non-credit course. Such materials shall be of continuing value to a student outside of the classroom setting and shall not be solely or exclusively available from the District.

Required instructional materials shall not include materials used or designed primarily for administrative purposes, class management, course management, or supervision.

Where instructional materials are available to a student temporarily through a license or access fee, the student shall be provided options at the time of purchase to maintain full access to the instructional materials for varying periods of time ranging from the length of the class up to at least two years. The terms of the license or access fee shall be provided to the student in a clear and understandable manner prior to purchase.

For more information on Instructional Materials Fees and the Student Fee Handbook, please visit the Academic Affairs web page [www.elcamino.edu/administration/vpaa/instructional-materials-fee.asp](http://www.elcamino.edu/administration/vpaa/instructional-materials-fee.asp).



## Credit by Examination

### Credit by Examination

#### Board Policy 4235

The El Camino Community College District is committed to allowing students to receive credit for a specific course by demonstrating mastery of the subject matter and/or skills by credit by exam.

Updated lists of courses eligible for credit by examination, as determined by appropriate faculty, shall be kept in the academic and counseling division offices as well as the records office. It shall be established that the knowledge, skills, and/or experiences gained outside the regular College curriculum are compatible with the course objectives for which credit is requested. Proficiency in subject matter or skills shall be assessed through examination, portfolio, or skills demonstration, and must be at the level expected of students who have successfully completed the course at El Camino College.

The eligibility and fee requirements, along with the procedures and restrictions for obtaining credit by examination, shall be on file in the Administrative Procedures Handbook. These are available in the College records office, counseling services, and all academic division offices. They are also published in the College Catalog and Schedule of Classes.

#### Eligibility Requirements

For eligibility requirements and procedure for earning credit by exam, visit the El Camino College Admissions web page [www.elcamino.edu/admissions/credit.asp](http://www.elcamino.edu/admissions/credit.asp).

#### Restrictions

Units earned by examination are not to be considered a part of the student's subject load. Units shall not be used for reports to Selective Service, Social Security, Veterans Administration, or similar agencies and shall not be considered in verifying eligibility for athletics or student government.

### Courses Eligible for Credit by Examination

#### Business Division

Business 60A  
Business 60B  
Business 60C  
Computer Information Systems 13

#### Health Sciences and Athletics Division

Contemporary Health 1, 3  
First Aid 1  
Physical Education 260  
Radiologic Technology A, 111, 123  
Respiratory Care 170, 172, 174, 176, 178, 280, 282, 284, 286

#### Humanities Division

Chinese 1, 2, 3  
French 1, 2, 3, 4  
German 1, 2  
Italian 1, 2  
Japanese 1, 2, 3, 4  
Spanish 1, 2, 3, 4

#### Industry and Technology Division

Administration of Justice 100, 103, 107, 111, 115, 126, 130, 131, 170  
Air Conditioning and Refrigeration 5, 6, 21, 23, 25, 27, 30, 34  
Architecture 100, 104, 119, 150A, 158, 170, 172  
Automotive Collision Repair/Painting 1A, 1B, 1C, 1D, 2A, 2B, 2C, 4A, 4B, 4C, 4D, 5A, 5B, 5C, 5D, 6, 20, 22, 24, 26  
Automotive Technology 1, 14, 16, 21, 23, 24, 25, 43, 81  
Computer Aided Design/Drafting 5, 7, 28, 31, 32, 33, 37, 43, 45  
Electronics and Computer Hardware Technology 11, 110, 120, 122, 124, 130, 191  
Engineering Technology 10, 12, 14, 15, 16, 18  
Fashion 10, 11, 15, 20, 27, 28, 31, 35, 41  
Fire and Emergency Technology 1, 2, 3, 4, 5, 6, 9, 10, 11, 19, 20, 144  
Machine Tool Technology 2, 10A, 16, 40, 46, 101  
Manufacturing Technology 70  
Welding 15, 40A, 45

## Alternative Credit Options

### Advanced Placement Tests

High school students who enroll in ECC Compton Center may petition for College credit based on high school Advanced Placement (AP) courses. Credit will be given for the following courses if the student has taken the appropriate Advanced Placement Test and received a score of 3, 4 or 5. (No credit will be given for a score of 1 or 2.) The maximum number of units granted toward the associate degree will be 15.

Students who plan to transfer to a four-year university must check the institution's AP credit policies in their catalog or the institution's website, or consult an ECC Compton Center academic counselor for unit and credit information for general education and major preparation. Course credit and units granted at ECC Compton Center may differ from course and unit credit granted by the transfer institution.

Art Examination (History of Art):  
Art 102A (3 units)  
Art 102B (3 units)

Biology Examination:  
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 World History):  
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 (10 units) - Score of 4 or 5 on  
Calculus BC Examination

Note: Students who score a 3 or better on the Statistics AP exam, the Calculus AB exam, or the Calculus BC exam have met the math competency for the associate degree, IGETC (Area 2) and CSU General Education (Area B4) mathematics requirements.

Physics Examination:  
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 specialist in the Admissions Office.

### Acceptance of Credit

Credits earned at other colleges which are accredited by one of the regional accrediting agencies are customarily accepted for transfer to El Camino College on receipt of an official transcript of record.

Students submitting transcripts from other colleges for the purpose of receiving a degree or certificate from El Camino College must submit an official college-to-college transcript. Transcripts delivered by students will not be considered for degree or certificate purposes.

Appropriate college level United States Armed Forces courses also may be accepted for credit.

## Credit for Military Service

The experience of the veteran will be reviewed and any appropriate credit granted. Once El Camino College reviews and awards credit, it will become part of the veteran's permanent record. Credit will be awarded after completion of one semester of attendance at El Camino College.

A copy of the veteran's separation document (form DD 214) or discharge paper (including the side showing dates of induction and separation) must be on file. No credit is approved for the six month Reserve program. Credit for military service is given according to length of service as follows:

- 90 days to 1 year: 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.

College Level Examination Program (CLEP) credit will be accepted when it is included on the American Council on Education (ACE) transcript.

## High School Equivalents

Many courses and curricula offered at El Camino College are based on the supposition that the student has completed the specific high school courses generally included in the college preparatory program. If the student has not met the prerequisite to a course, the individual should complete the equivalent El Camino College course indicated here:

High School Course	El Camino College Course
Algebra, first year	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



## EL CAMINO COLLEGE ADVANCED PLACEMENT (AP) CREDIT

Advanced Placement (AP) Tests with scores of 3, 4, or 5 can be used to meet IGETC, CSU GE, Associate of Arts and Associate of Science General Education (GE), and/or Associate Degree major requirements.

Course credit and units granted at El Camino College may differ from course credit and units granted by a transfer institution. Please check with the four-year transfer institution's AP credit policies in their catalog or on their website, or consult an El Camino College academic counselor for unit and course credit for major preparation.

AP Exam	ECC Associate Degree		CSU		UC	
Type of Exam	ECC GE Area	ECC Course Equivalent for Major Requirements	CSU GE	Units Earned Toward Transfer	IGETC	Units Earned Toward Transfer
Art History	Humanities 3 semester units	Art 102A, 102B 3 units	Area C1 or C2 3 semester units	6 semester units	Area 3A or 3B	8 quarter/5.3 semester units
Art (Studio)			N/A	3 semester units	N/A	8 quarter/5.3 semester units
Biology	Natural Sciences 4 semester units	Biology 10 4 units	Area B2 and B3 4 semester units	6 semester units	Area 5B (with lab)	8 quarter/5.3 semester units
Calculus AB	Language and Rationality 3 semester units	Math 190 – Score of 4 or 5 5 units Score of 3 meets AA/AS math competency requirement	Area B4 3 semester units	3 semester units*	Area 2A	4 quarter/2.7 semester units**
Calculus BC	Language and Rationality 3 semester units	Math 190 Score of 3 5 semester units Math 190 and 191 Score of 4 or 5 9 semester units	Area B4 3 semester units	6 semester units*	Area 2A	8 quarter/5.3 semester units**
Calculus BC with AB subscore			Area B4 3 semester units	3 semester units		
AP CALCULUS EXAM LIMITATIONS				*Only one exam may be used toward transfer		**Maximum credit 8 quarter/ 5.3 semester units for both
Chemistry	Natural Sciences 4 semester units	Chemistry 1A 5 semester units The student must have a score of 4 or 5 and provide a laboratory portfolio to the Dean of Natural Sciences for evaluation before credit is earned	Areas B1 and B3 4 semester units	6 semester units	Area 5A (with lab)	8 quarter/5.3 semester units
Chinese Language & Culture	Humanities 3 semester units	No course equivalency established; two consecutive semesters	Area C2 3 semester units	6 semester units	Area 3B and 6A	8 quarter/5.3 semester units

AP Exam	ECC Associate Degree		CSU		UC	
Type of Exam	ECC GE Area	ECC Course Equivalent for Major Requirements	CSU GE	Units Earned Toward Transfer	IGETC	Units Earned Toward Transfer
Computer Science A		<b>Computer Science 1</b> 4 semester units The student must have a score of 4 or 5	N/A	3 semester units**	N/A	2 quarter/1.3 semester units***
AP CS EXAM LIMITATIONS				<b>**Maximum One exam toward transfer</b>		<b>***Maximum credit 4 quarter/2.7 semester units for both CS exams</b>
Economics - Macroeconomics	Social/Behavioral Sciences 3 semester units	<b>Economics 1</b> 3 semester units	Area D2 3 semester units	3 semester units	Area 4	4 quarter/2.7 semester units
Economics - Microeconomics	Social/Behavioral Sciences 3 semester units	<b>Economics 2</b> 3 semester units	Area D2 3 semester units	3 semester units	Area 4	4 quarter/2.7 semester units
English - Language & Composition	Language and Rationality 3 semester units	<b>English 1A</b> Score of 3 or 4 4 semester units <b>English 1A and 1B</b> Score of 5 7 semester units	Area A2 3 semester units	6 semester units	Area 1A	8 quarter/5.3 semester units*
English - Literature & Composition	Language and Rationality or Humanities 3 semester units	<b>English 1A</b> 4 semester units <b>or English 1B</b> 3 units Score of 3 or 4 <b>English 1A and 1B</b> Score of 5 7 units	Area A2 and C2 6 semester units	6 semester units	Area 1A or 3B	8 quarter/5.3 semester units*
AP ENGLISH EXAM LIMITATIONS						<b>*8 quarter/5.3 semester units maximum for both exams</b>
Environmental Science	Natural Sciences 3 semester units	No course equivalency	Area B2 and B3 (if taken prior to Fall 2009) <b>or</b> Area B1 and B3 (regardless of when taken) 4 semester units	4 semester units	Area 5A (with lab)	4 quarter/2.7 semester units
French Language & Culture	Humanities 3 semester units	No course equivalency established; two consecutive semesters	Area C2 3 semester units	6 semester units	Area 3B and 6A	8 quarter/5.3 semester units

AP Exam	ECC Associate Degree		CSU		UC	
Type of Exam	ECC GE Area	ECC Course Equivalent for Major Requirements	CSU GE	Units Earned Toward Transfer	IGETC	Units Earned Toward Transfer
French Literature	Humanities 3 semester units	No course equivalency established; two consecutive semesters	Area C2 3 semester units (if taken prior to Fall 2009)	6 semester units	Area 3B and 6A	8 quarter/5.3 semester units
German Language & Culture	Humanities 3 semester units	No course equivalency established; two consecutive semesters	Area C2 3 semester units	6 semester units	Area 3B and 6A	8 quarter/5.3 semester units
Government & Politics - Comparative	Social/Behavioral Sciences 3 semester units	Political Science 2 3 semester units	Area D 3 semester units	3 semester units	Area 4	4 quarter/2.7 semester units
Government and Politics - U.S.	Social/Behavioral Sciences 3 semester units	Political Science 1 3 semester units	Area D and US 2* 3 semester units	3 semester units	Area 4	4 quarter/2.7 semester units
AP GOVERNMENT EXAM LIMITATIONS			*Does not fulfill AHI California Government requirement	Student can satisfy the AHI requirement after transfer		
History - European	Social/Behavioral Sciences or Humanities 3 semester units	History 141 3 semester units	Area C2 or D 3 semester units	6 semester units	Area 3B or 4	8 quarter/5.3 semester units
History - U.S.	Social/Behavioral Sciences or Humanities 3 semester units	History 101 and 102 6 semester units	Area C2 or D 3 semester units	6 semester units	Area 3B or 4F	8 quarter/5.3 semester units
History - World	Social/Behavioral Sciences or Humanities 3 semester units	History 140 3 semester units	Area C2 or D6 3 semester units	6 semester units	Area 3B or 4	8 quarter/5.3 semester units
Human Geography	Social/Behavioral Sciences 3 semester units	No course equivalency established	Area D5 3 semester units	3 semester units	Area 4E	4 quarter/2.7 semester units
Italian Language & Culture	Humanities 3 semester units	No course equivalency established; two consecutive semesters	Area C2 3 semester units	6 semester units	Area 3B and 6A 3 semester units	8 quarter/5.3 semester units
Japanese Language & Culture	Humanities 3 semester units	No course equivalency established; two consecutive semesters	Area C2 3 semester units	6 semester units	Area 3B and 6A	8 quarter/5.3 semester units
Latin - Vergil	Humanities 3 semester units	No course equivalency	Area C2 3 semester units	3 semester units	Area 3B and 6A	4 quarter/2.7 semester units
Latin - Literature	Humanities 3 semester units	No course equivalency	Area C2 3 semester units (if taken prior to Fall 2009)	6 semester units	Area 3B and 6A	4 quarter/2.7 semester units

AP Exam	ECC Associate Degree		CSU		UC	
Type of Exam	ECC GE Area	ECC Course Equivalent for Major Requirements	CSU GE	Units Earned Toward Transfer	IGETC	Units Earned Toward Transfer
<b>Music Theory</b>		No course equivalency established			N/A	8 quarter/5.3 semester units
<b>Physics B</b>	Natural Sciences 4 semester units	<b>Physics 2A Score of 5</b> 3 semester units	B1 and B3 4 semester units*	4 semester units*	Area 5A (with lab)	8 quarter/5.3 semester units**
<b>Physics C – Electricity/ Mechanics</b>	Natural Sciences 3 semester units	<b>Physics 1A Score of 5</b> 4 semester units	Area B1 and B3 4 semester units*	4 semester units*	Area 5A (with lab)	4 quarter/2.7 semester units**
<b>Physics C – Electricity/ Magnetism</b>	Natural Sciences 3 semester units	<b>Physics 1A Score of 5</b> 4 semester units	Area B1 and B3 4 semester units*	4 semester units*	Area 5A (with lab)	4 quarter/2.7 semester units**
<b>AP PHYSICS EXAM LIMITATIONS</b>				<b>*Maximum 4 semester units toward GE and 6 semester units toward transfer</b>		<b>**Maximum 8 quarter/5.3 semester units for both exams</b>
<b>Psychology</b>	Social/Behavioral Sciences 3 semester units	<b>Psychology 5</b> 3 semester units	Area D9 3 semester units	3 semester units	Area 4I	4 quarter/2.7 semester units
<b>Spanish Language</b>	Humanities 3 semester units	No course equivalency established; two consecutive semesters	Area C2 3 semester units	6 semester units	Area 3B and 6A	8 quarter/5.3 semester units
<b>Spanish Literature</b>	Humanities 3 semester units	No course equivalency established; two consecutive semesters	Area C2 3 semester units	6 semester units	Area 3B and 6A	8 quarter/5.3 semester units
<b>Statistics</b>	Language and Rationality 3 semester units	<b>Math 150 Score of 4 or 5</b> 4 semester units Score of 3 meets AA/AS math competency requirement	Area B4 3 semester units	3 semester units	Area 2	4 quarter/2.7 semester units

**AA/AS:** Students with a score of 3 or better may use the AP exam for general education credit in the appropriate area; however, credit for a specific course to meet major requirements for the AA or AS degree, will need to follow the course equivalent outlined by the academic department. A student who receives AP credit and then takes the equivalent ECC course will have the unit credit for such duplication deducted prior to being awarded the AA/AS degree. Credit by Advanced Placement exam is noted and listed on a student's transcript, with units assigned and no grade. A maximum of 15 units of AP credit can be applied to the associate degree.

**CSU GE:** The Advanced Placement examinations may be incorporated into the certification of CSU General Education-Breadth requirements by any certifying institution. All CSU campuses will accept the minimum units shown and apply them toward fulfillment of the designated General Education-Breadth area if the examination is included as part of a full or subject-area certification. Please note that individual CSU campuses may choose to grant more units than those specified toward completion of General Education- Breadth and major requirements.

**IGETC:** AP exams must be used in area indicated regardless of where the certifying CCC's discipline is located.

**TRANSFER:** Students may use AP exams for transfer units and major requirements; however, the student must consult with a counselor and the four year institution's college catalog or AP credit policies. Course credit varies by campus.

## Other College Programs

### Distance Education

Many courses offered at El Camino College Compton Center 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. In addition to online courses, we offer hybrid courses. Hybrid courses require weekly on-campus class sessions.

Students may register for Distance Education courses through regular registration process via [www.compton.edu](http://www.compton.edu). For further information, visit the Distance Education Office located in Vocational Technology Building, Office 140, call 310-900-1600, ext. 2137 or visit [www.compton.edu/academics/distance-ed](http://www.compton.edu/academics/distance-ed).

### Honors Program

The Honors Transfer Program (HTP) at El Camino College Compton Center is designed to better prepare the highly motivated student to transfer successfully to a university and complete a bachelor's degree. The HTP provides a unique learning environment that stresses academic excellence and develops the awareness necessary to achieve this goal. The major objective of the program is to prepare students to transfer by focusing on advanced reading, writing, critical thinking, and study skills. Honors courses are academically enriched to stimulate students intellectually, encourage independent critical thinking, and promote close interaction between students and faculty. Honors courses fit into requirements of various associate degrees, as well as requirements needed to transfer to the University of California, California State University, and most other universities.

Students may apply to the Honors Transfer Program by completing the online application, available at [www.compton.edu/academics/honorsprogram/](http://www.compton.edu/academics/honorsprogram/) or by visiting the HTP Office in MS 113. For further information, call 310-900-1600, ext. 2336

### Alpha Gamma Sigma

To help students further develop their leadership skills, a chapter of the Alpha Gamma Sigma (AGS) Honor and Scholarship Society was established at El Camino College Compton Center in 2011. In addition to supporting the academic endeavors of its members through study groups, tutorials and scholarship opportunities, the Alpha Gamma Sigma (AGS) Honor and Scholarship Society offers ways to gain leadership positions, participate in community service, and meet other students with similar academic interests.

Students must maintain a GPA of 3.0 or better to be members of AGS and most chapters set a minimum number of hours of community service that members must perform. At its annual convention, AGS awards thousands of dollars in scholarships to members who excel in academics and in service. Qualifying students may contact the Office of Student Life for information on joining AGS and to obtain an application. Additional information about AGS can be found at [www.ags-honor.org/](http://www.ags-honor.org/).



## Administration

### Keith Curry

Chief Executive Officer, Provost  
Compton Community College District  
El Camino College Compton Center

### Barbara Perez

Vice President,  
El Camino College Compton Center

## Deans/Officers

### Phillip Humphreys

Dean, Student Services

### Felipe Lopez

Chief Business Officer

### Wanda Morris

Director of Nursing

### Rodney Murray

Dean, Student Learning

### Abiodun Osanyinpeju

Interim Dean, Student Learning

### Rachelle Sasser

Dean, Human Resources

### Thamizhchelvi Subramaniam

Dean, Student Success

## Directors/Managers/ Supervisors

### Christine Aldrich

Director, EOPS/CARE

### Richette Bell

Director, Admissions and Records

### Patricia Bonacic

Director, CalWORKS, TANF, SRC

### Shirley Edwards

Director, Child Development Center

### Steven Haigler

Director of Accounting

### Reuben James III

Director, Fiscal Affairs

### Elizabeth Martinez

Director, Enrollment Services

### Eric Mendoza

Director, Student Development & Athletics

### Linda Owens

Director, Facilities Planning and Operations

### Mytha Pascual

Director, Financial Aid

### Andrei Yermakov

Director of Information Technology Services

## Academic Division Chairs

### Sevana Khodaghlian

Division 1 - Health, Natural Sciences & Human  
Services

### Mohammad Khalilzadeh

Division 2 - Arts, Social Sciences & Career  
Technical Education

### Donald Roach

Division 3 - Humanities & Mathematics

## Faculty Council Executive Board

### Paul M. Flor

Chairperson

### Christopher Halligan

Vice-Chairperson

### Nikki Williams

Secretary



## A

### Aasi, Fazal (2007)

Professor, Anatomy  
B.S., M.D. Panjab University

### Abbassi, Ali (1997)

Professor, Mathematics  
B.S. Detroit Institute of Technology  
M.S. West Coast University

### Adabzadeh, Ali (2010)

Lecturer, Automotive Collision & Repair  
ASE and I-CAR Certification  
B.A., M.A. University of California, Los Angeles  
Ph.D., Capella University

### Abdulmalek, Sulaiman (2009)

Lecturer, Biological Sciences  
B.S. University of Istanbul, Turkey  
M.S. University of Bridgeport  
Ph.D., New Mexico State University

### Aguilar, Carmela (1985)

Professor, Counseling, English as a Second  
Language  
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B.A. University of California, Los Angeles  
M.A. California State University, Dominguez Hills

### Ahmad, Manzoor (1987)

Professor, Business  
B.S. Government College  
LL.B. University Law College  
M.B.A. Northwest Missouri State University

### Allen, Jennell (1980)

Professor, Counseling  
B.A. California State University, Long Beach  
M.S. California State University, San Bernardino

### Alpern, Ronny (1992)

Professor, Mathematics  
B.A., M.A. California State University, Fullerton

### Altermatt, Robert (2010)

Lecturer, Chemistry  
B.A., M.A. California State University, Dominguez  
Hills

### Armstrong, Sunny (2008)

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M.A. California Polytechnic University,  
San Luis Obispo

### Arroyo, Celia (1991)

Professor, Counseling  
A.A. Compton Community College  
B.A., M.A., M.Ed. California State University,  
Dominguez Hills

### Arroyo, Silvia T. (1998)

Professor, Counseling  
B.S. University of Nebraska  
M.A., Psy.D. United States International University

**B**

- Baldi, Michelle (2015)**  
*Instructor, Nursing*  
A.D.N. El Camino College  
B.S.N., M.S.N., M.Ed. Western Governors University
- Barber, Lessie (2007)**  
*Lecturer, Nursing*  
B.S.N. University of Mississippi  
M.P.T. California State University, Dominguez Hills
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*Instructor, Counseling*  
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M.S. University of La Verne
- Benson, Eugene (1981)**  
*Professor, Welding*  
A.S. Los Angeles Trade Technical College  
B.S. University of La Verne

- Bergman, Stephan (2009)**  
*Lecturer, English*  
A.A. Los Angeles Harbor College  
B.A., M.A. California State University, Dominguez Hills

- Bernaudo, Jose (2004)**  
*Professor, English*  
B.A. University of California, Irvine  
M.A. Claremont University

- Bibb, Nicole (2010)**  
*Lecturer, Mathematics*  
B.S. Loyola Marymount University  
M.S. California State University, East Bay

- Black, Dustin (2010)**  
*Lecturer, History*  
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- Brabbee, Andrew (2009)**  
*Lecturer, Spanish*  
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- Bunting, Ikaweba (2002)**  
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**C**

- Carrillo, Rosa (2008)**  
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- Carter, Sekou (2010)**  
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- Clark, Leonard (2001)**  
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- Conn, Bradfield (2006)**  
*Lecturer, Psychology*  
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M.S. Pepperdine University  
Ph.D. Alliant International University

- Cooper, Erin (2010)**  
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- Cortez-Perez, Aurora (1996)**  
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- Coti, Karla (2011)**  
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- Craig, Elizabeth (2008)**  
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M.A. Seton Hall University  
M.A. California State University, Dominguez Hills

- Crozier, Judith (2014)**  
*Lecturer, English*  
B.A. University of Wyoming at Laramie  
M.P.W. University of Southern California

- Curry, Keith (2007)**  
*Chief Executive Officer, Provost*  
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**D**

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M.Ed. Texas A&M-Commerce

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**E**

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- Estrada, Harvey (2000)**  
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**F**

- Flor, Paul M. (1997)**  
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- French-Preston, Essie (1986)**  
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**G**

- Garcia, Annaruth (1998)**  
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- Garcia, Jose (2009)**  
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- Gill, Jack (1999)**  
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- Gillis, Amber (2012)**  
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**H**

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**J**

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- Jacobs, Bruce (2009)**  
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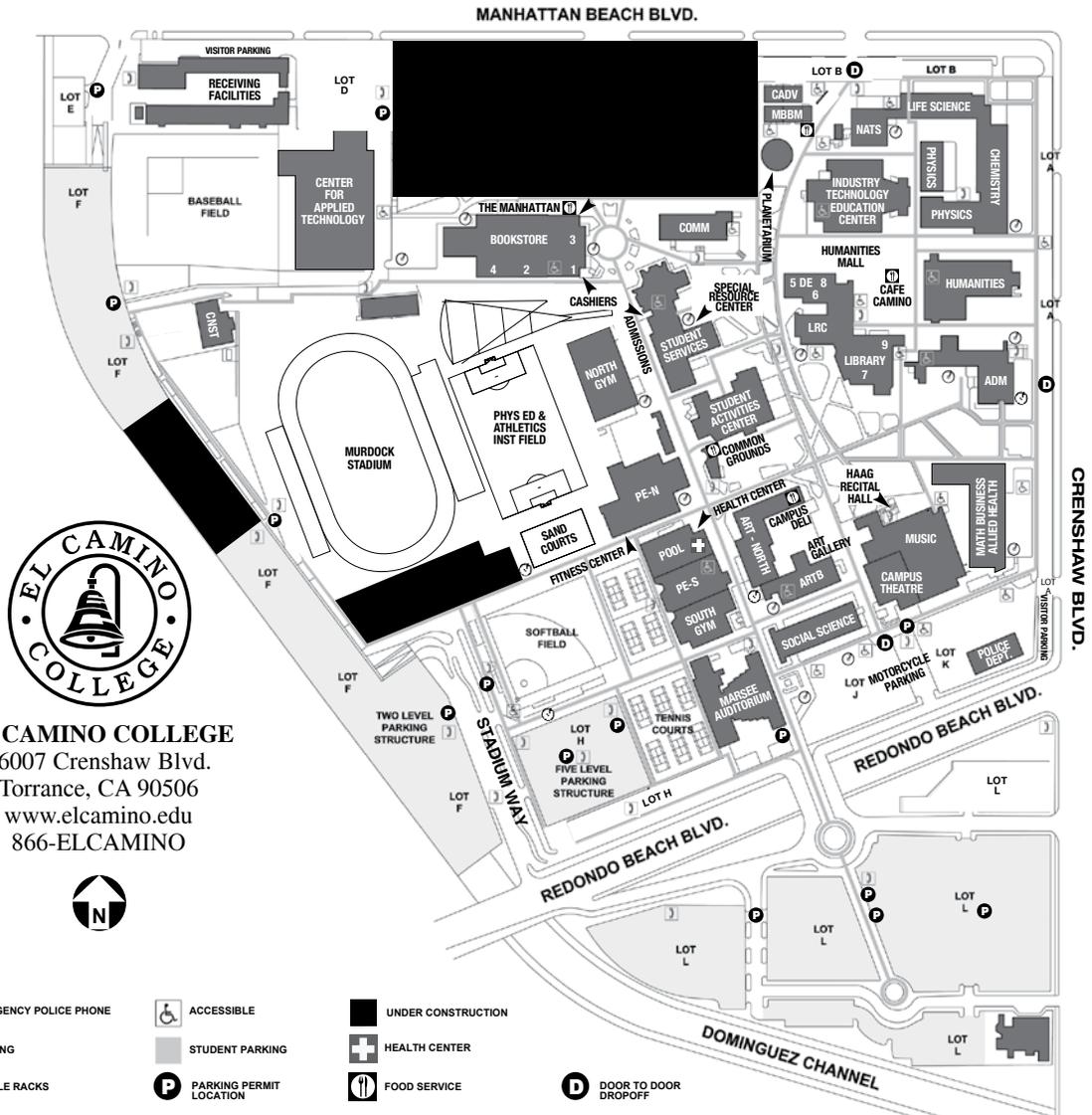
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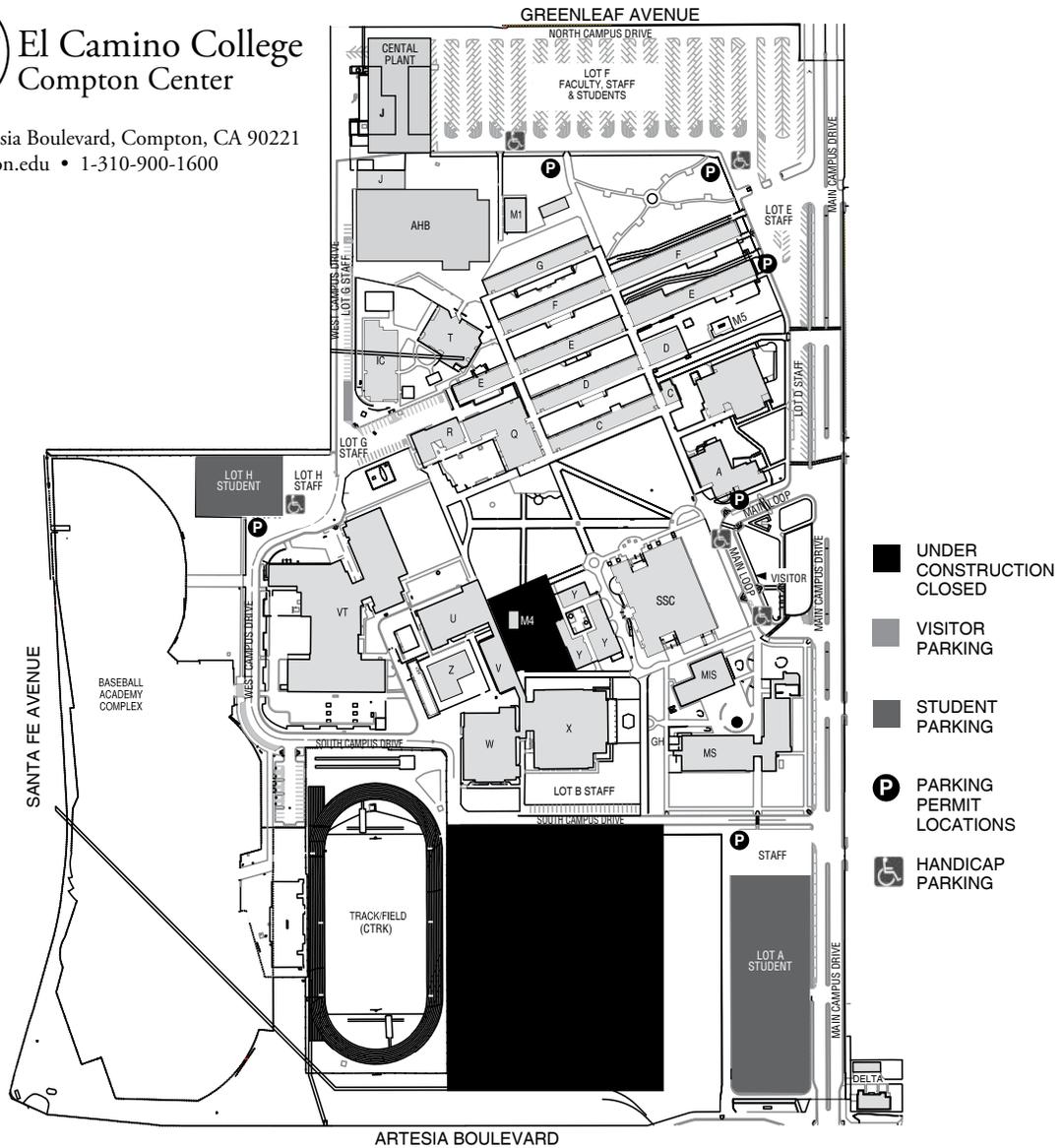
<b>EL CAMINO COLLEGE</b>			
BUILDING / LOCATION	ABBREVIATION	BUILDING / LOCATION	ABBREVIATION
ADMINISTRATION	ADM	MURDOCK STADIUM	STAD
ART AND BEHAVIORAL SCIENCE	ARTB	MUSIC	MUSI
ART BUILDING - NORTH	ARTN	NATURAL SCIENCE	NATS
BASEBALL FIELD	BBFL	NORTH GYM	NGYM
BOOKSTORE	BKST	PHYS ED & ATHLETICS INST FIELD	PEFD
CAMPUS THEATRE	TH	PHYSICAL EDUCATION NORTH	PE-N
CENTER FOR APPLIED TECHNOLOGY	CAT	PHYSICAL EDUCATION SOUTH	PE-S
CHEMISTRY	CHEM	PHYSICS	PHYS
CHERRY TREE OFFICES	CTO	PLANETARIUM	PLAN
COMMUNICATIONS	COMM	POLICE DEPARTMENT	ECPD
COMMUNITY ADVANCEMENT OFFICE	CADV	POOL	POOL
CONSTRUCTION TECHNOLOGY	CNST	SAND COURTS	SAND
DISTANCE EDUCATION CENTER	DE	SOFTBALL FIELD	SBFL
FIELDHOUSE	FLDH	SOCIAL SCIENCE	SOCS
HUMANITIES	H	SOUTH GYM	SGYM
INDUSTRY TECHNOLOGY EDUCATION CENTER	ITEC	SPECIAL RESOURCE CENTER	SRC
LEARNING RESOURCES CENTER	LRC	STUDENT ACTIVITIES CENTER	ACTC
LIBRARY	LIB	STUDENT SERVICES CENTER	SSVC
LIFE SCIENCE	LS	TECHNICAL ARTS	TECH
MANHATTAN BEACH BLVD. MODULES	MBBM	TENNIS COURTS	TENN
MARSEE AUDITORIUM	AUD	YARD	YARD
MATH BUSINESS ALLIED HEALTH	MBA		

<b>CONFERENCE ROOMS:</b>	
<b>BOOKSTORE:</b>	
ALONDRA	1
DECATHLON	2
EAST DINING	3
STADIUM	4
<b>LIBRARY/LRC:</b>	
DISTANCE ED	5
ARCHIVES	6
LIBRARY 202	7
BASIC SKILLS LAB	8
LMTC - COMPUTER COMMONS	9



# El Camino College Compton Center

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www.compton.edu • 1-310-900-1600



## EL CAMINO COLLEGE COMPTON CENTER

A	Administration, Admissions & Records, Counseling, Dean of Student Services	M1	ESL/Classrooms
AHB	Allied Health Building, Dean of Student Learning (Health, Natural Sciences & Human Services)	M4	Molina Health Center
C	Academic Affairs, Bursar's Office, Business Affairs, Human Resources, Vice President Compton Center, Print Shop	M5	Upward Bound Math & Science
D	Transfer/Career Center	Q	Student Lounge, Cafeteria, Faculty & Staff Lounge
E	Outreach and School Relations, Assessment Center	R	Bookstore, Student Life
F	Classrooms, Financial Aid, Welcome Center	SSC	Library - Student Success Center, Dean of Student Success (Humanities & Mathematics)
G	Classrooms	T	Abel B. Sykes Jr. Child Development Center
IC	Child Development Center - Infant/Toddler Building	U	EOPS/CARE
J	Facilities Planning and Operations Department (including Maintenance, Tradesman, and Shipping & Receiving)	V	Campus Police Department (V-72), Classrooms
MS	Math/Science	VT	Dean of Student Learning (Arts, Social Sciences & Career Technical Education) CalWORKs, Special Resource Center (DSPS)
MIS	Management Information Systems	W	Physical Education, Athletics
		X	Gymnasium, Dance
		Y	Music, Theater Arts